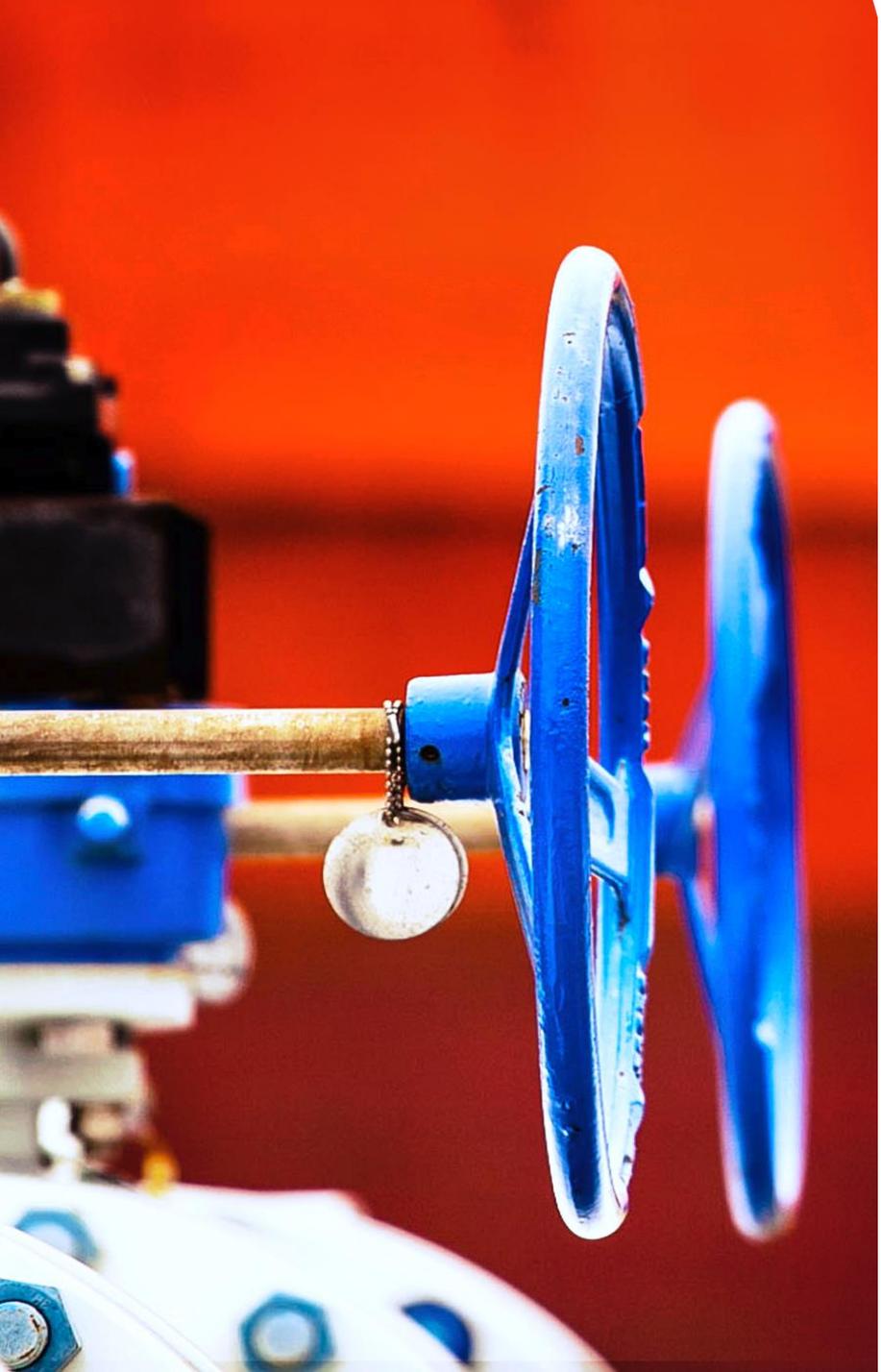




WELLS FARGO

Securities Research, Economics &
Strategy Midstream and Utility
Symposium

December 5, 2018



Statements contained in this presentation other than statements of historical fact are forward-looking statements. While these forward-looking statements, and any assumptions upon which they are based, are made in good faith and reflect our current judgment regarding the direction of our business, actual results will likely vary, sometimes materially, from any estimates, predictions, projections, assumptions or other future performance presented or suggested in this presentation. These forward-looking statements can generally be identified by the words "anticipates," "believes," "expects," "plans," "intends," "estimates," "forecasts," "budgets," "projects," "could," "should," "may" and similar expressions. These statements reflect our current views with regard to future events and are subject to various risks, uncertainties and assumptions.

We undertake no duty to update any forward-looking statement to conform the statement to actual results or changes in the company's expectations. For more information concerning factors that could cause actual results to differ from those expressed or forecasted, see NuStar Energy L.P.'s annual report on Form 10-K and quarterly reports on Form 10-Q, filed with the SEC and available on NuStar's website at www.nustarenergy.com. We use financial measures in this presentation that are not calculated in accordance with generally accepted accounting principles ("non-GAAP") and our reconciliations of non-GAAP financial measures to GAAP financial measures are located in the appendix to this presentation. These non-GAAP financial measures should not be considered an alternative to GAAP financial measures.



Introduction



This Year, We Have Worked Hard to Complete Our Stepped Plan to Achieve the Characteristics Demanded by the MLP Sector



Strong Coverage



Lower Leverage



Simplified Structure/
Governance



No IDR Burden



Maximized Self-
Funding



With Our High-Quality Assets, NuStar is Poised to Both Execute on Permian-Driven Growth Opportunities and Optimize Legacy Assets as Recovery Continues

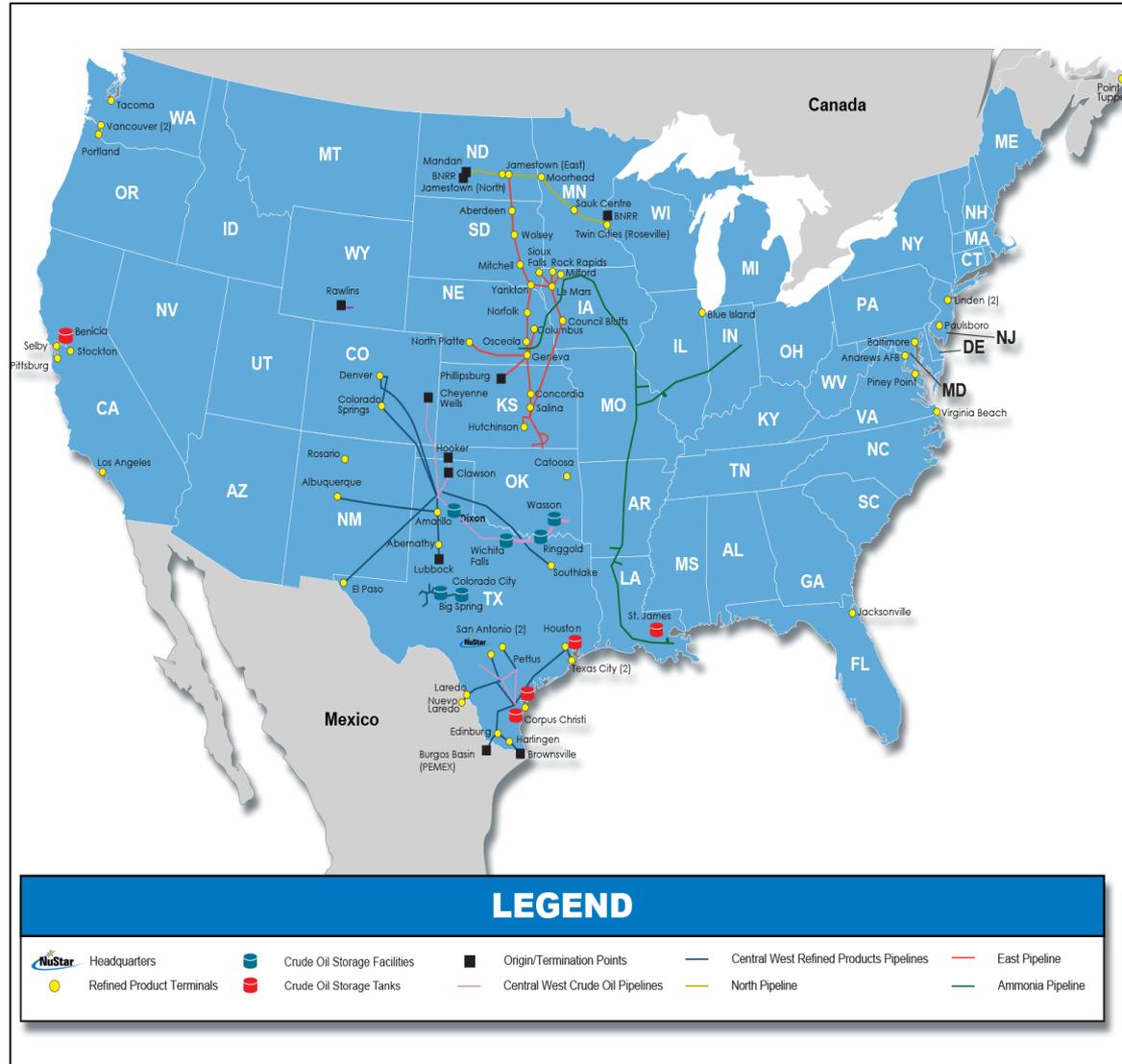


Current Profile

- ❑ Total Pipeline Miles: ~9,700
- ❑ Total Storage Capacity: ~88MM bbls
- ❑ Volumes Handled⁽¹⁾:
 - >1.5 MMBPD pipeline volumes
 - >335 MBPD storage throughput terminal volumes
- ❑ Total Enterprise Value: ~\$7B
- ❑ Total Assets: ~\$7B

NuStar has:

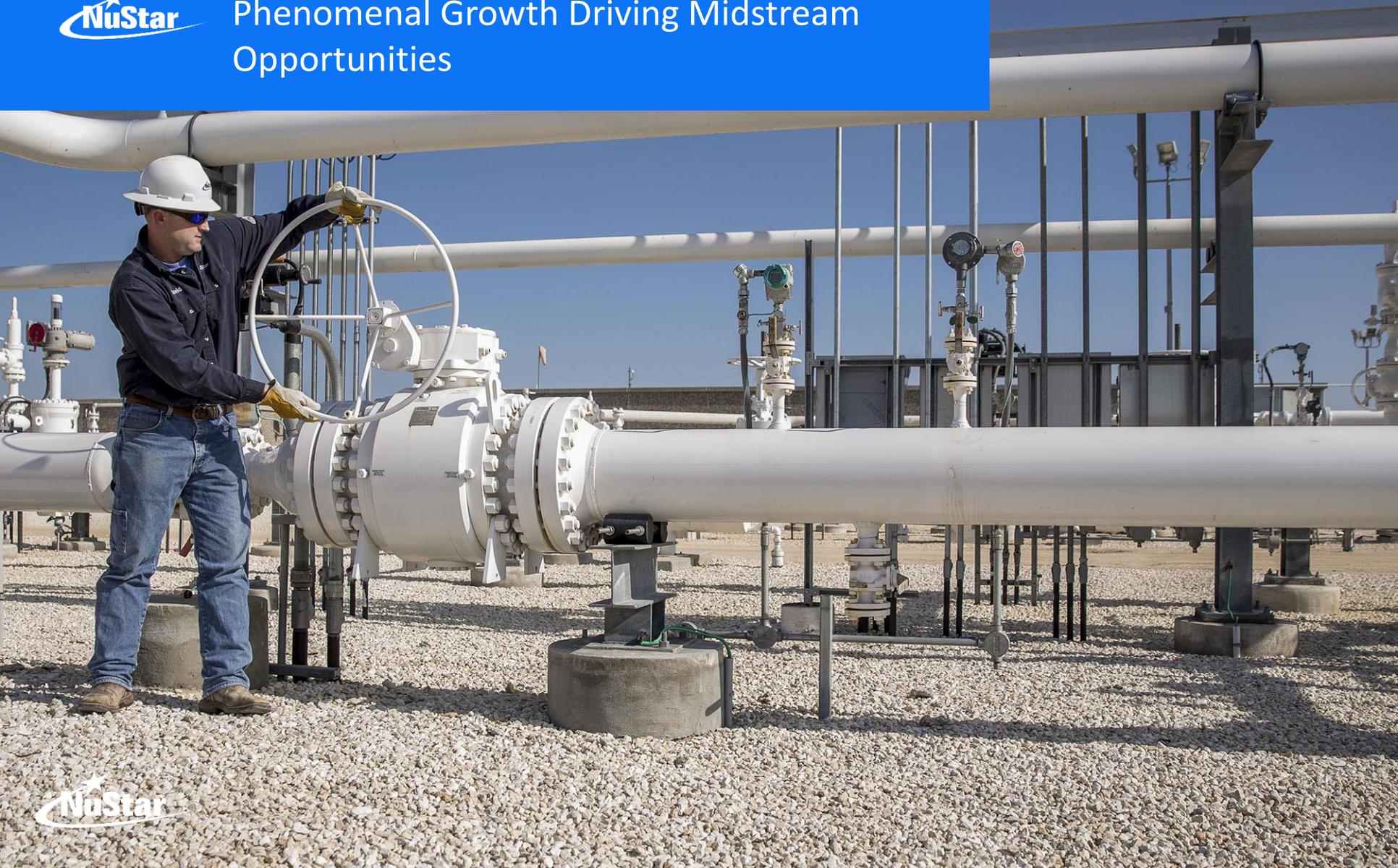
- ❑ Highly integrated U.S. pipeline & terminal systems
- ❑ Minimal direct exposure to commodity prices
- ❑ Significant crude oil midstream footprint in the Midland Basin of the Permian
- ❑ First-class Gulf Coast export facilities



(1) Average daily Pipeline Segment and Storage Segment volumes for the quarter ending 9/30/18.



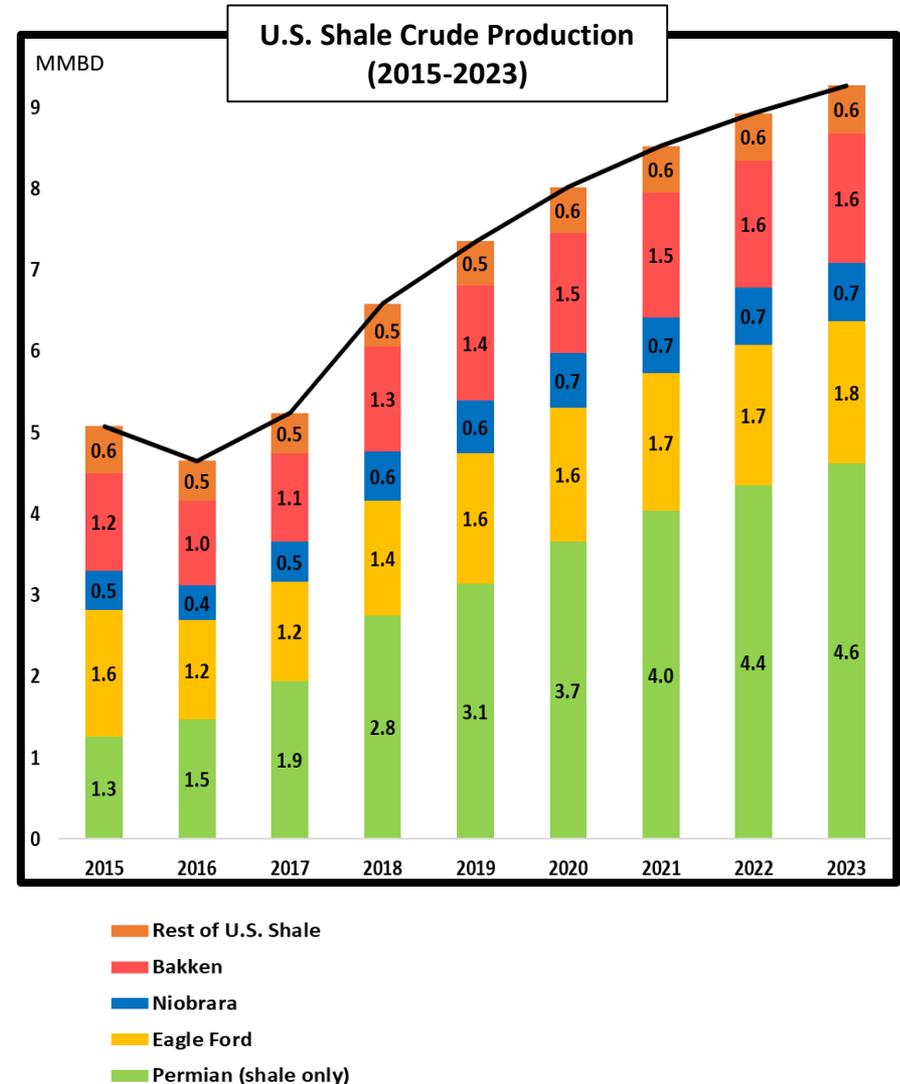
The Permian Basin: Phenomenal Growth Driving Midstream Opportunities



Since the Shale Boom Began, the Permian Basin Has Grown Faster Than Any Other and Driven U.S. Production Growth Overall

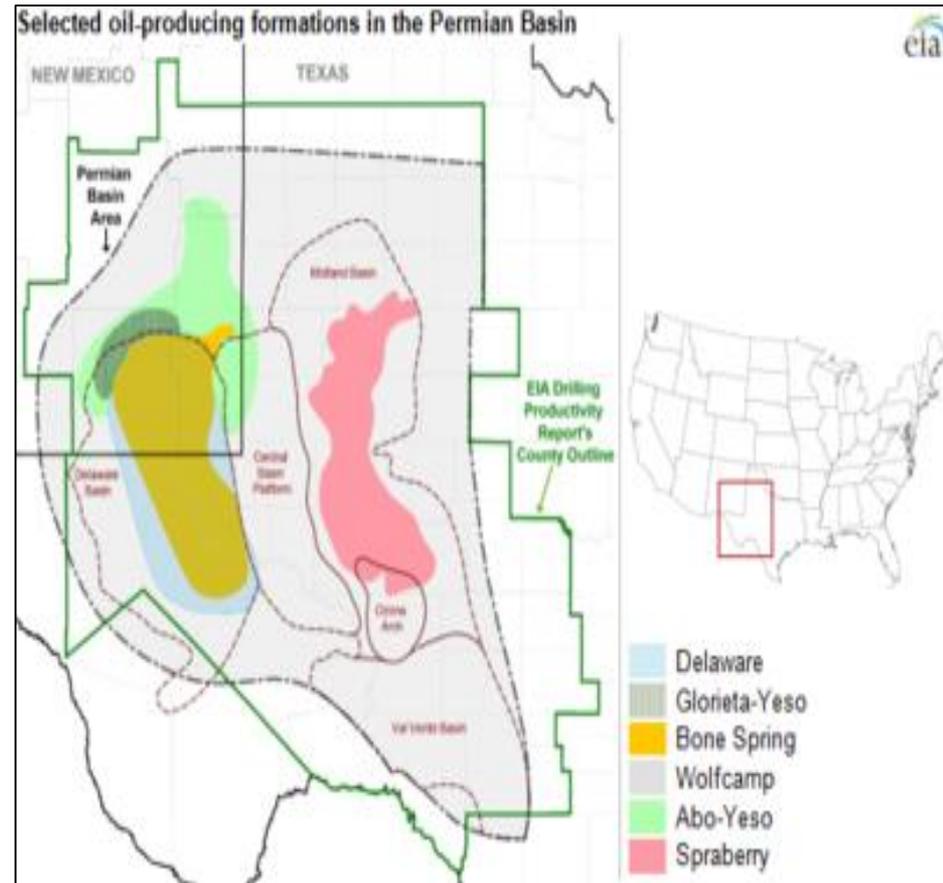


- **The Permian Basin's growth and growth expectations are unprecedented:**
 - Expected to have risen to a record 3.6 MMBD by year end, over 30% of the nation's output
 - Projected to exceed 5.0 MMBD by end of 2020 and to surge to 8.0 to 10.0 MMBD by the end of the decade
- **Largely due to Permian growth, the U.S. has surpassed Russia and Saudi Arabia to become the largest crude producer on the planet**



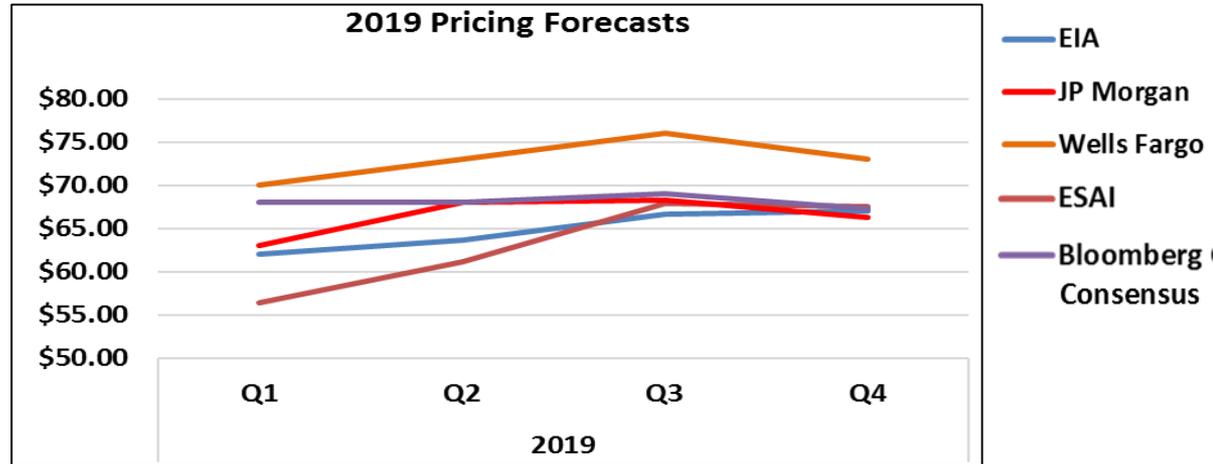
If the Permian Basin Were a Country, It Would Rank #7 Among the World's Top Liquids Producers

- **A massive oil basin of epic proportions...**
 - ❑ A pool of more recoverable oil than any field in the world except for Saudi Arabia's Ghawar
 - ❑ 250 miles wide, 300 miles long (75,000 square miles)
 - ❑ The Wolfcamp Formation, all by itself, is estimated to hold 20 billion barrels of oil
- **The world's hottest oil basin**
 - ❑ Several majors and many E&P firms have shifted resources away from other plays to focus on the Permian
 - Permian investments reaped **double-digit returns** in 2017, even with oil barely 60% of what it was in 2014
 - ❑ Currently accounts for **56% of nation's active oil rigs**

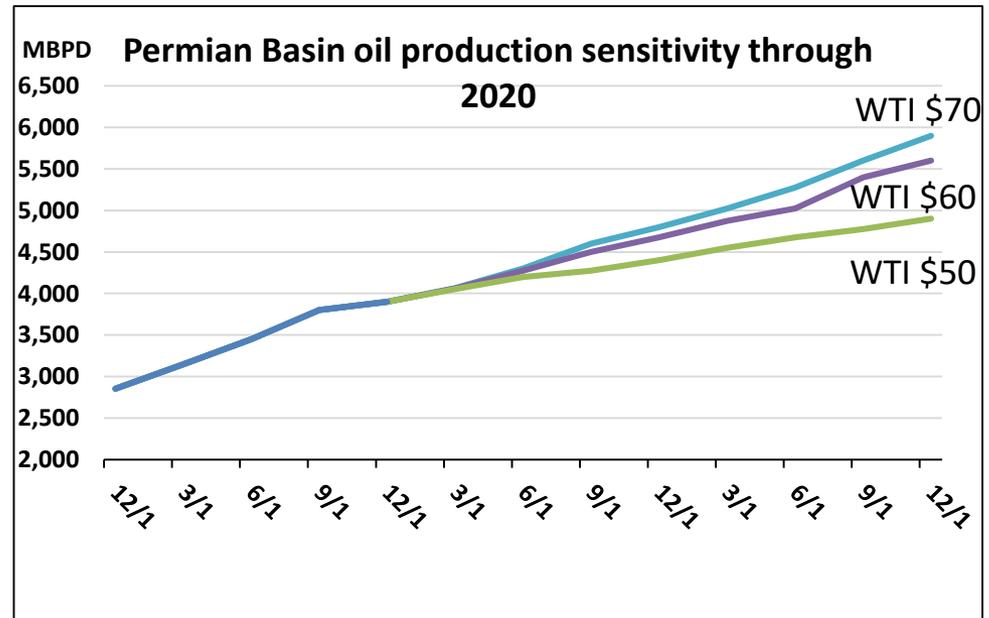


While Experts Continue to Predict Stronger Oil Prices in 2019, Even at \$50 WTI, the Permian Would Continue to Grow

● **Forecasted 2019 oil prices remain above, and in some cases, well above, current prices**



● **The resilience and efficiency of the Permian continues to produce healthy growth even at \$50 WTI**



Source: Bloomberg (12/3/2018), EIA (11/6/2018), ESAI (11/27/2018), JP Morgan (11/27/2018), Wells Fargo (10/2018); and Rystad Energy's "Shale Trends Report- November 2018"

Producers Remain Bullish on Permian Growth, Strength & Resiliency



November 7, 2018 Third Quarter 2018 Conference Call

"We were also able to close multiple significant acquisitions in the Northern Midland Basin..."

"These acquisitions add 25,000 Tier 1 acres to our existing inventory and have three zones with greater than 100% IRRs at current commodity prices."



November 7, 2018 Third Quarter 2018 Conference Call

"Permian oil production exceeded the top-end of the range, growing by 7% quarter over quarter."

"Our volumes that we transport to the Gulf Coast increased to 185,000 barrels a day from 165,000 barrels a day, and will increase in January to 200,000 barrels per day."

"We're still on track to place 60 Version 3.0+ wells online for the second half of this year..." ***"The results look really phenomenal, as we have gotten to a point, we think we've reached an optimal place when it comes to these high volume completions."***

Source: Earnings Call Transcripts



November 2, 2018 Third Quarter 2018 Conference Call

"Our Permian tight liquids production growth continued. It's up 57% quarter on quarter 2018 versus 2017. And we're currently running 38 rigs in the Delaware and Midland basins."



October 31, 2018 Third Quarter 2018 Conference Call

"The Permian continues to be as busy as ever, November oil production is forecasted to be 3.5 million barrels a day, up 26% year-over-year, and accounting for 60% of the total U.S. production growth this year."

"Our average lateral length for the entire program will increase 20% next year to 9,700 feet."

"We expect strong 2019 exit rate with fourth quarter 2019 oil production expected to be 25% higher than the fourth quarter of 2018."



November 2, 2018 Third Quarter 2018 Conference Call

"Q3 was a strong, clean quarter across the board. Efficient operations, strong production growth, cost compression, it's the kind of quarter we've been building for and the kind of quarter we've expected to deliver."

"Weather impacts and other planned downtime will likely translate to lower volume growth in Q4 than we saw in Q3. Even so, we're on track to deliver north of 50% oil growth during a year in which we're holding our development pace constant."

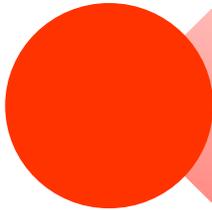


Permian Opportunities



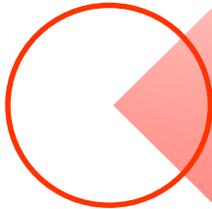
Because of the Permian's Track Record and Expected Growth, It is the Genesis for Most Midstream Growth Opportunities, In and Out of the Basin Itself

- With statistics like the Permian's, it's no surprise the Basin is the genesis for the majority of, as well as the strongest, growth opportunities for midstream MLPs
- NuStar is participating in the two out of three major Permian growth areas that fit our capital program requirements and strategic plan:



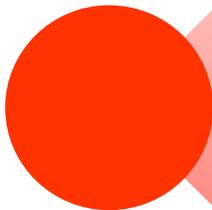
Intra-basin opportunities

- Gathering, storing and transporting Permian barrels to regional hubs



Long-haul opportunities

- Transporting Permian barrels to larger market hubs with new-build lines and expansions



Export opportunities

- Exporting Permian barrels from Gulf Coast export facilities

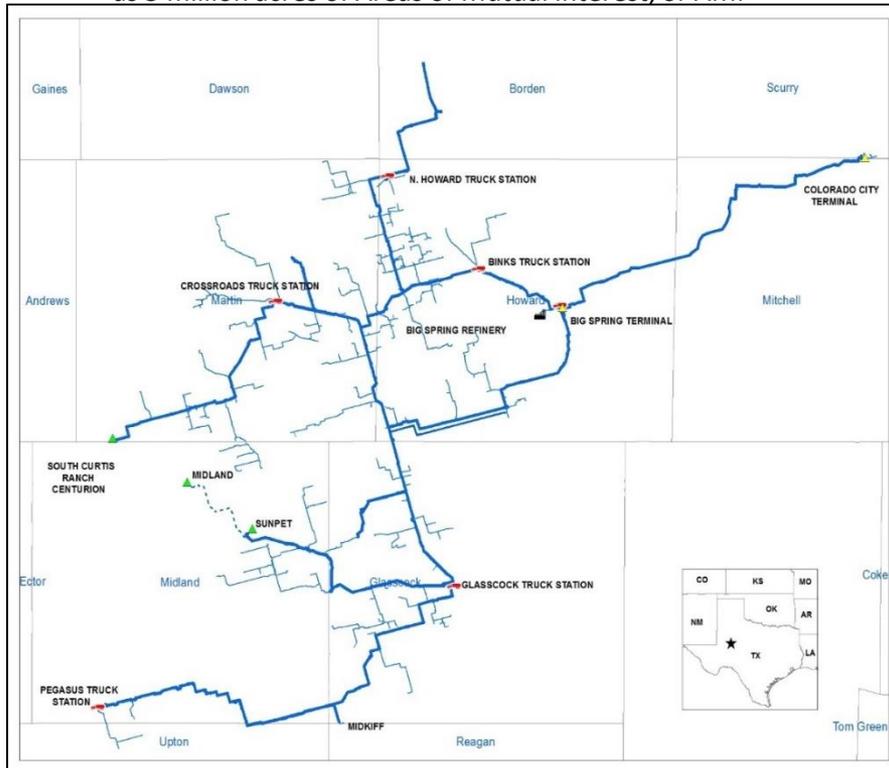
- Beyond these major opportunity areas, the Permian's growth has also created some significant "spillover" opportunities for NuStar

Intra-Basin Opportunities: We Acquired Our Permian Crude System to Participate, and It Continues to Prove Itself “Core of the Core”



- **System is located in 5 of the 6 most active counties in the prolific Midland Basin**

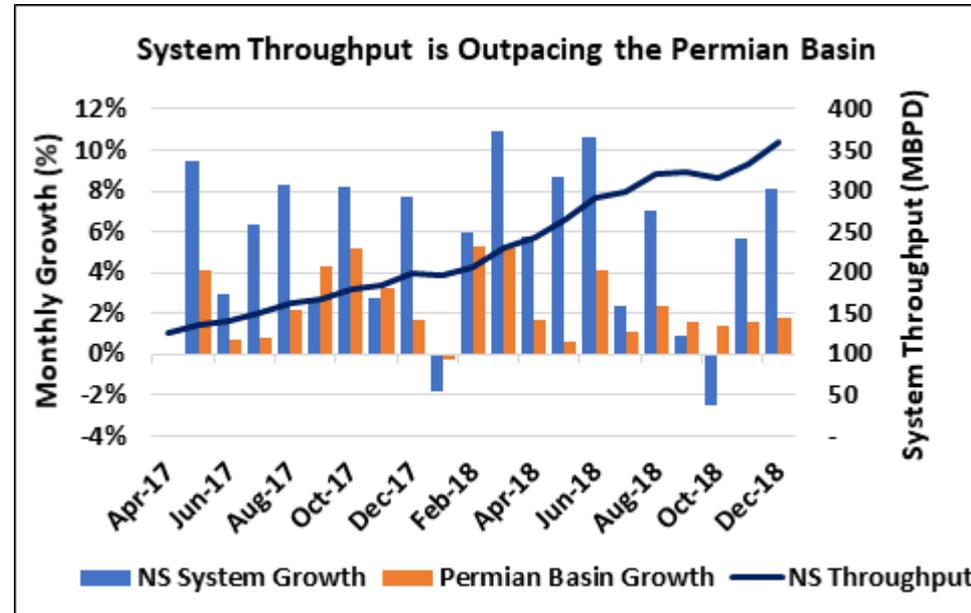
- ~840 miles of pipeline with 460,000 BPD of capacity, 1 million barrels of storage capacity, over 500,000 dedicated acres, as well as 5 million acres of Areas of Mutual Interest, or AMI



- **The system provides customers with excellent access to multiple downstream end markets**

- Delivery points and flow assurance into Big Spring, Midland and Colorado City

- Based on our producer projections, we continue to expect our 2018 exit rate to be in excess of 360,000 BPD, up approximately 190% since the acquisition, while the Permian overall is up 61% in same period

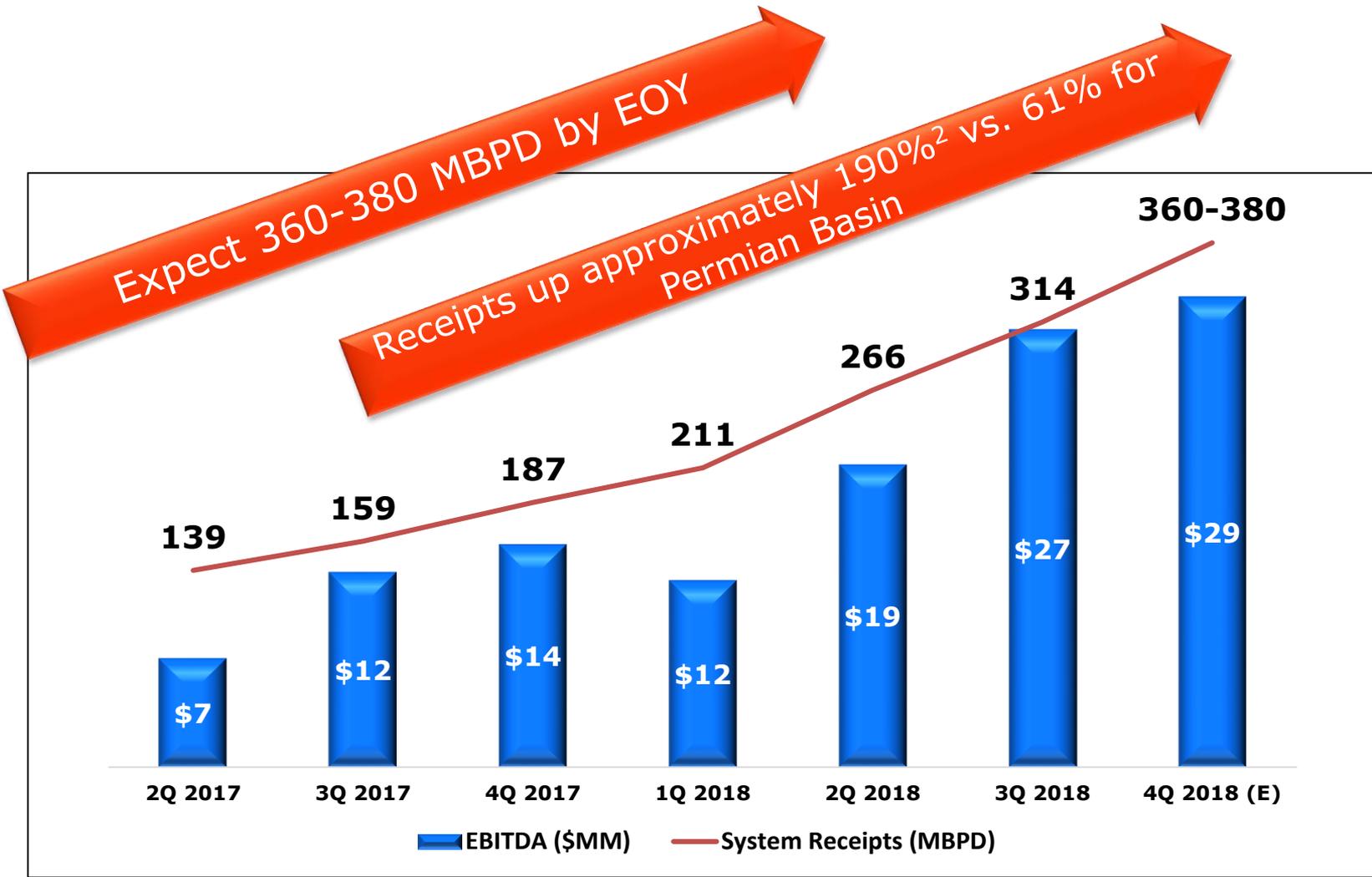


- **Since last May, we have:**

- Constructed ~200 miles of pipe
- Added 20,000 dedicated acres
 - We expect 82 new wells on this additional acreage, through 2019
- Increased the number of well connection sites on our system from 102 to 185
 - Recently approved projects to connect to another 26 sites

- **We project the System’s expected EBITDA to more than double from 2018 to 2020**

Intra-Basin Opportunities: Our Permian System's Receipts and EBITDA Are Growing Rapidly



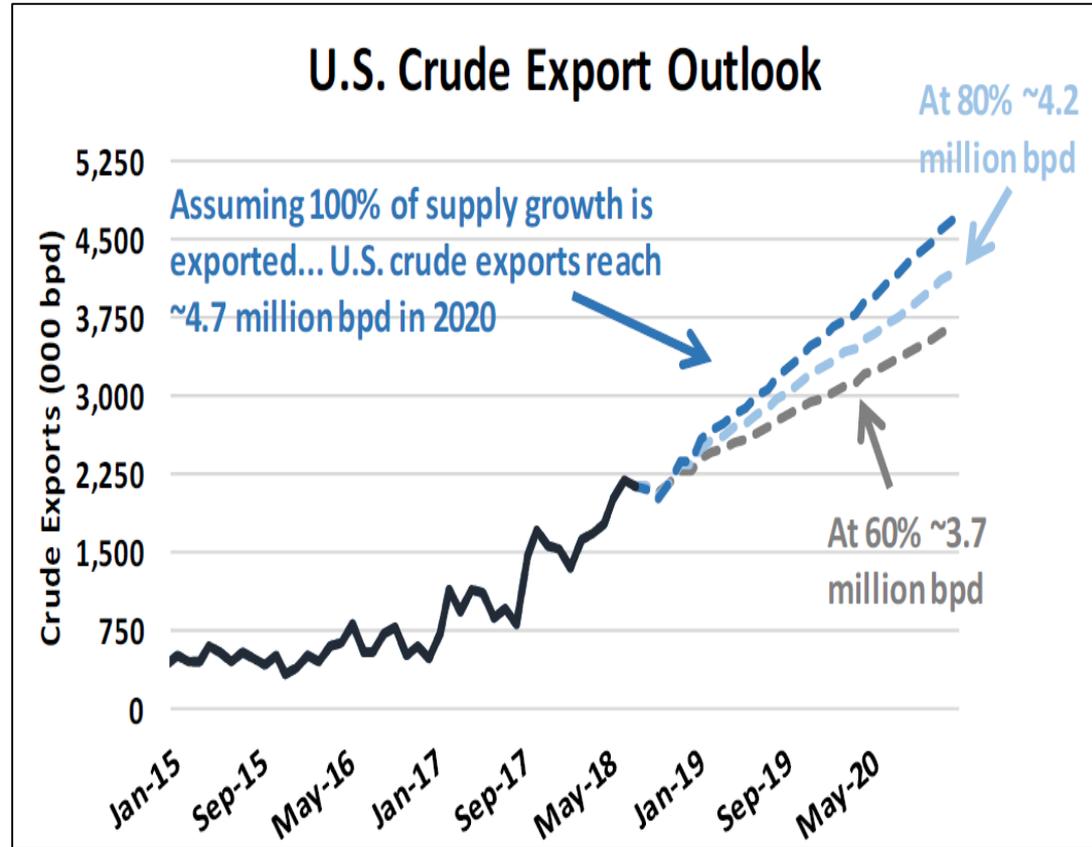
Source: EIA Drilling Productivity Report

1 - Please see Appendix for reconciliations of non-GAAP financial measures to their most directly comparable GAAP measures
 2 - Based on December 2018 throughput nominations

Export Opportunities: Incremental Permian Barrels, Over and Above Regional Refiners' Needs, Will Move Out of the Gulf Coast Through Export Facilities

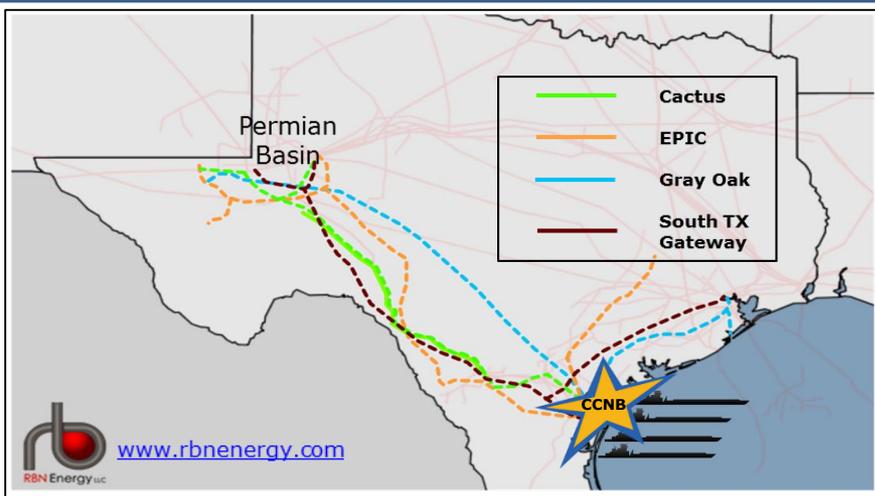


- **While the Gulf Coast is home to 45% of U.S. refining capacity, regional refiners' appetite for light, sweet crude is already largely satiated, unless refiners prioritize upgrade investments**
- **Permian barrels are increasingly light, and regional refineries are running as much light, sweet crude as they can**
 - Because of this regional supply/demand imbalance, most analysts expect incremental Permian crude production growth will be exported out of the region to supply refineries elsewhere in the U.S. and around the globe



- **U.S. exports are expected to double by 2022 (even if U.S. refiners act decisively to invest to upgrade for more light crude)**

Export Opportunities: NuStar's CCNB Dock Facility is Uniquely Positioned to Benefit From Export Growth

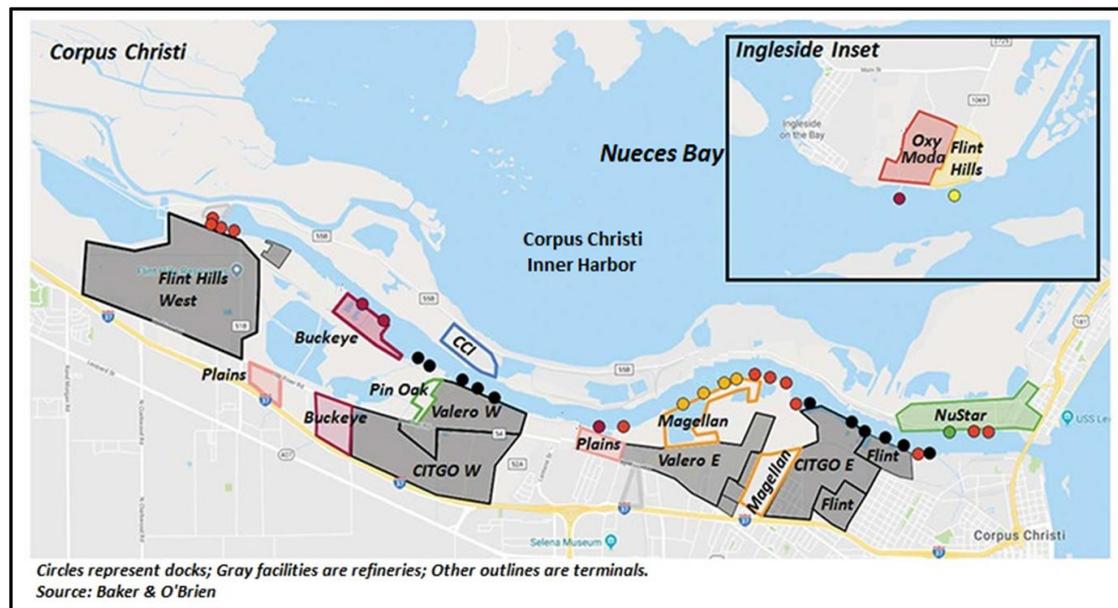


● With around 2.0 million BPD of additional Permian long-haul pipeline capacity coming into service over the next two years and headed toward Corpus Christi, the Port of Corpus Christi should benefit from incremental Permian light barrels destined for other markets

- ❑ The Port of Corpus Christi offers a cost-effective alternative to Houston's congestion
- ❑ The deepest draft on the Texas coast

● NuStar's CCNB facility:

- ❑ 3.3 million barrels of segregated crude storage capacity (Expandable to ~4.3 million barrels)
- ❑ Four docks with a combined 100,000 barrels per hour loading capacity
- ❑ Located at entrance to Port, which saves customers an estimated 4-6 hours over competing facilities
- ❑ Can accommodate Aframax vessels

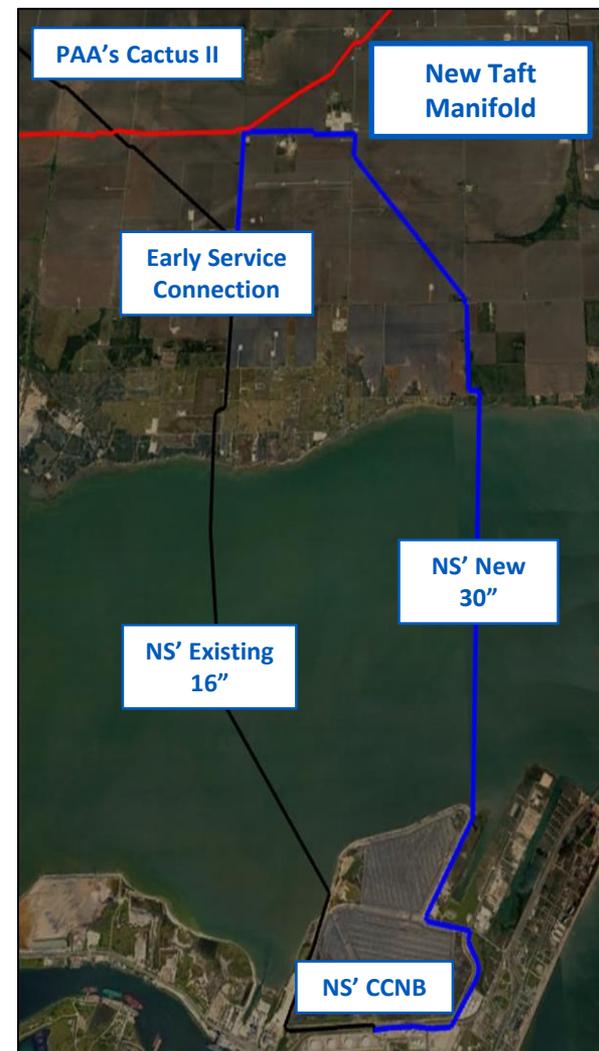


● **Trafigura's four-year commitment to transport and store WTI on our South Texas and CCNB assets will support:**

- ❑ Opportunity for early-service: Starting as soon as 2019, we are connecting PAA's Cactus II pipeline to our South Texas system to transport WTI on our 16" existing pipeline to our CCNB facility
- ❑ A longer-term project to construct:
 - A new 30" pipeline from Taft to our CCNB facility
 - 600,000 barrels of storage at CCNB, bringing our capacity at the facility to 3.9 million barrels (of which Trafigura will lease 1.6 million)
- ❑ Expected capital spend of approximately \$100 million generating a multiple in the 2– 4X range

● **Additional opportunities:**

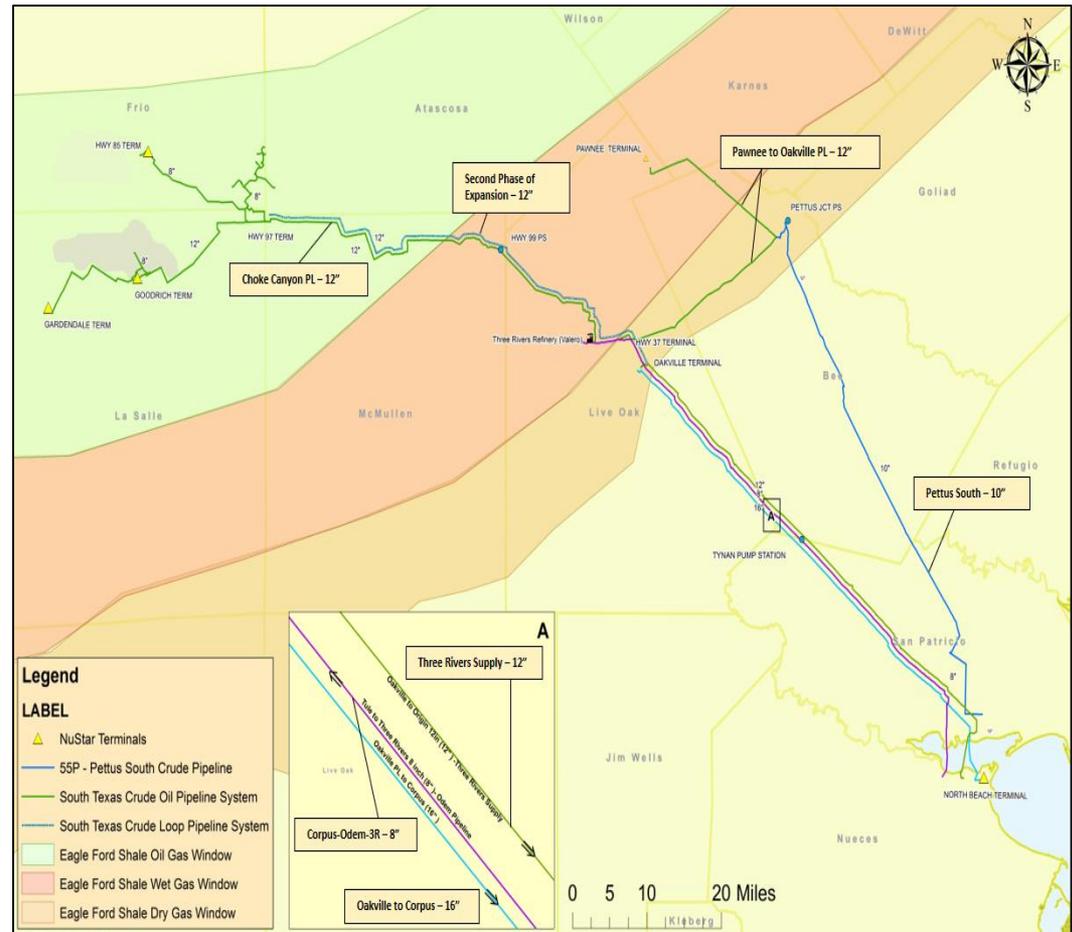
- ❑ We are in discussions to connect to other long-haul pipeline projects and with parties for additional commitments
- ❑ We have also initiated discussions with the Port of Corpus Christi to explore a connection to its Harbor Island crude oil export project, which will include VLCC loading capabilities



“Spillover” Opportunities: Our South Texas Crude System is Uniquely Positioned to Benefit From the Inland WTI Price Differentials, Which Create Opportunities for Both Shippers and Resourceful Midstream Operators



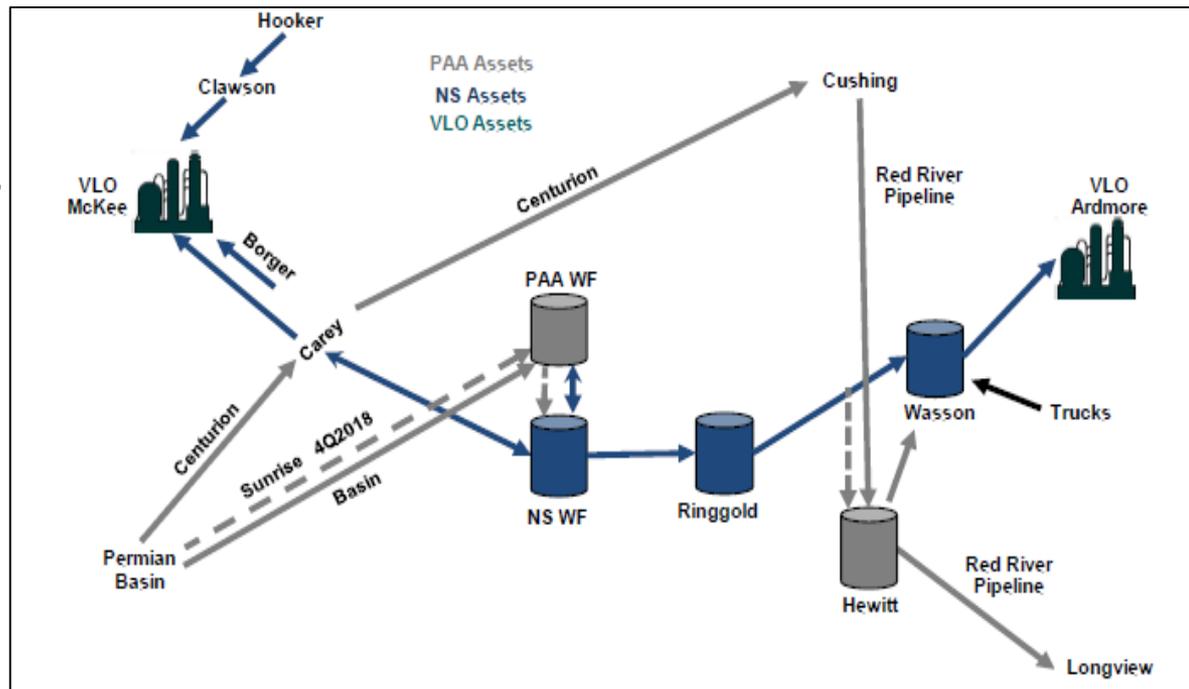
- **Differentials have widened on market concerns that the basin’s 2018 production trajectory will drive a near-term shortfall in long-haul takeaway capacity**
 - Shippers are looking to find ways to benefit from the price dislocation, and NuStar has assets well-positioned to help them do just that
- **Beyond the Trafigura project, we are exploring additional opportunities to offer the options to additional customers**
- **We now have T&D contracts for ~116,000 BPD on a system with 240,000 BPD capacity**
 - This year, we renewed commitments for ~50,000 BPD with customers on our South Texas System
- **Our system is also benefiting from incremental barrels trucked from the Permian**



“Spillover” Opportunities: We Are Also Working to Supply Permian Barrels to the Ardmore and McKee Refineries from Plains’ Sunrise II Pipeline



- Starting in November, our customer will have the optionality to supply the Ardmore and McKee refineries with Permian barrels from Plains’ Sunrise II expansion
- We have made an additional connection to our Wichita Falls terminal to support increased volumes and move Permian barrels to both Ardmore, McKee and third-party pipelines
- We have also signed a long-term commitment to ship barrels between Wichita Falls, TX and Hewitt, OK to support deliveries to a third-party pipeline
 - The projects help us serve our customers’ needs and benefit from longer-haul tariff and incremental barrels



"Spillover" Opportunities PLUS Export Opportunities: Our St. James Terminal is Benefiting From Price Dislocations Now and Plan to Capitalize on Export Growth in the Future



- **We have executed contracts for unit train off-loading due to widening differentials out of the Permian, Western Canada and Bakken (expect 3-10 trains per month)**

- **We are also looking to facilitate exports of barrels delivered via our existing and planned pipeline connections**

- Capline's reversal would have potential to bring large volumes of heavy Canadian and Bakken crude for use in regional refineries and export to other locations
- Bayou Bridge will bring Permian light barrels, along with Bakken and Canadian, either for export or local use

- **St. James is a large facility with room for expansion and three marine berths to capitalize on exports**

- Export capabilities currently support Aframax size vessels (expandable to Suezmax with limited capital spend)





Optimizing Our Legacy Assets



Our Projects to Facilitate Export of Refined Products to Supply Northern Mexico Are Progressing on Schedule



● Several years back, we recognized the growing need for refined products to supply to Mexico

- ❑ In response, we developed projects to fulfill that demand and expand use of underutilized assets in south Texas

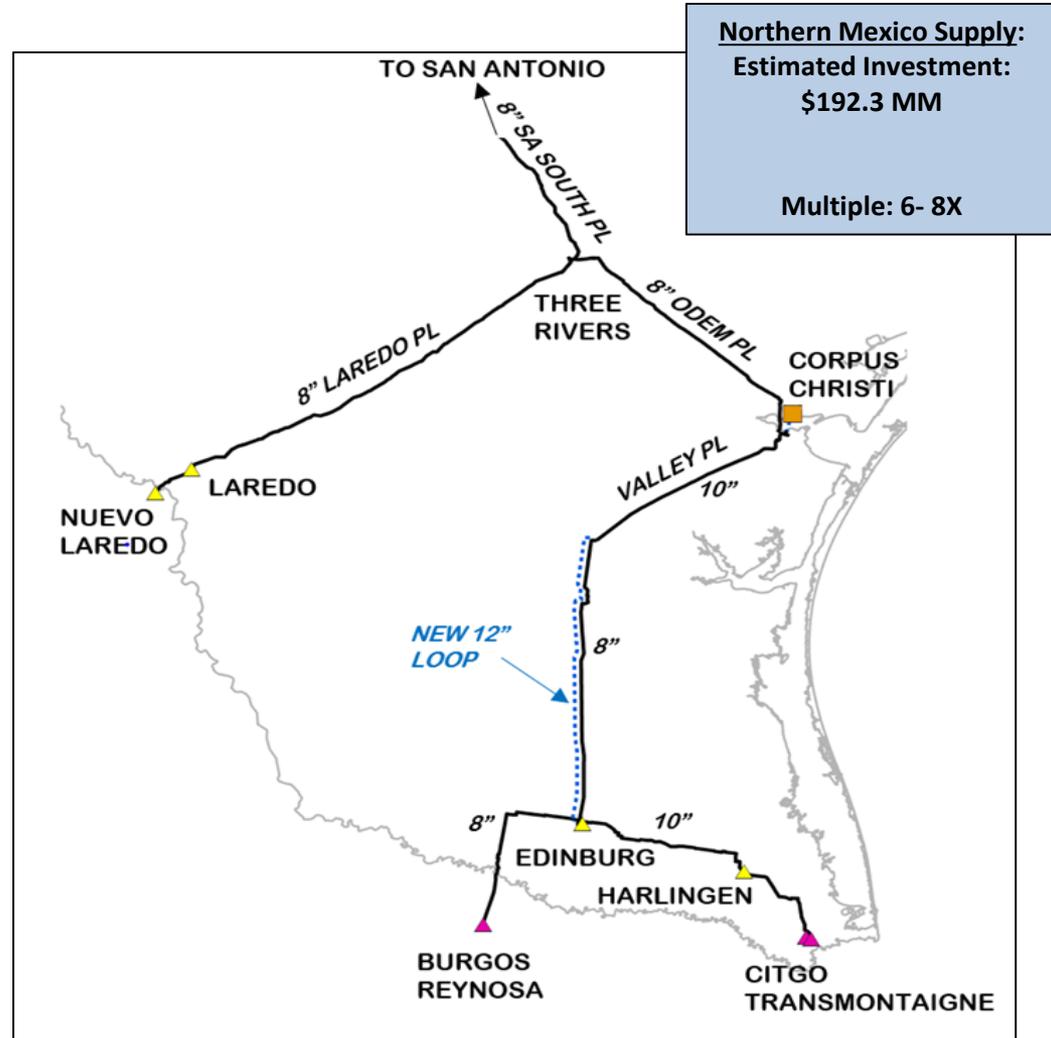
● Projects update:

❑ Nuevo Laredo Project for Valero

- Early ULSD service scheduled to start in Q1 2019
- Odem PL, Dos Laredos pipeline and Nuevo Laredo terminal expansion should be completed by February 2020

❑ Valley Pipeline Expansion for Vitol

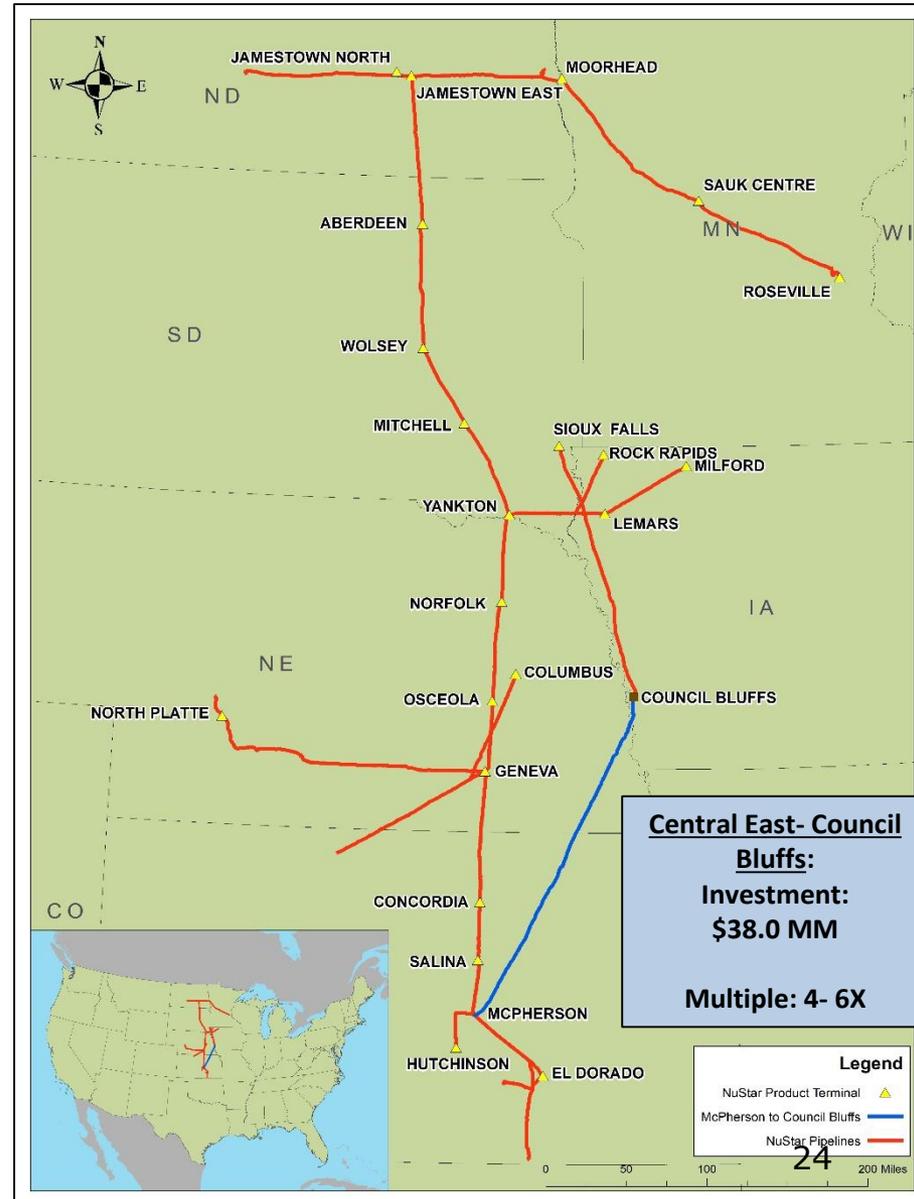
- Vitol's Matamoros facility is expected to be in service in Q4 2019
- NuStar's project is on schedule and expected to be in service in Q3 2019



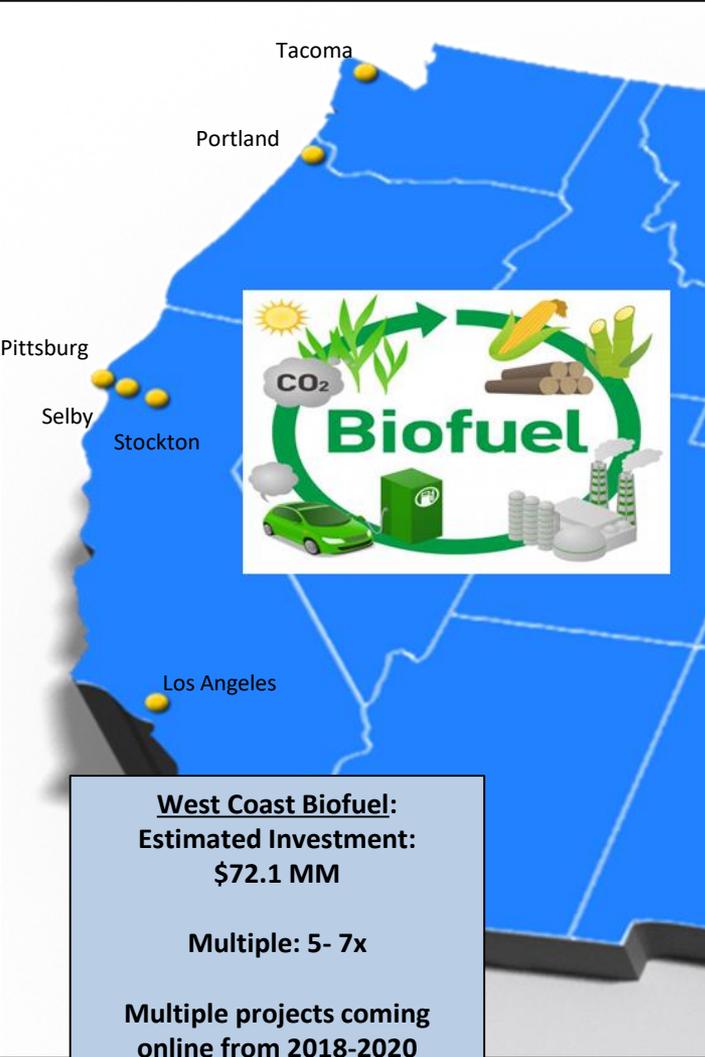
Our Central East- Council Bluffs System Offers Multiple Opportunities to Increase Our Share of a Mature Market



- **Our Council Bluffs acquisition provides us with expanded pipeline connectivity to offer our customers additional options for supply and trading to balance their positions across the mid-continent and access to the Omaha, NE market**
- **We have also expanded our footprint, which has allowed us to expand our leased storage and our menu of proprietary additive and blending service**
- **We plan to continue to broaden our services to meet our customers' needs and compete in the market with bio-diesel service, rail receipt and loading option**

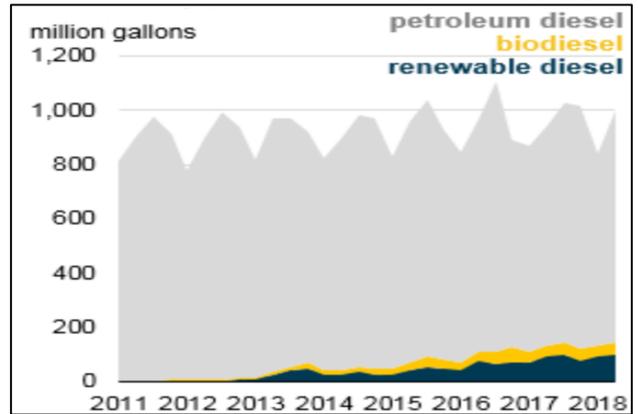


The West Coast Presents the Most Challenging Regulatory Environment for the U.S. Energy Industry, But Our Biofuel Strategy Leverages Regulations to Develop Opportunities



- **Renewable fuels, including renewable diesel, biodiesel, and ethanol, are growing in importance, and market share, in the U.S. and internationally**

Low Carbon Fuel Standard Quarterly Net Supply for Select Fuels



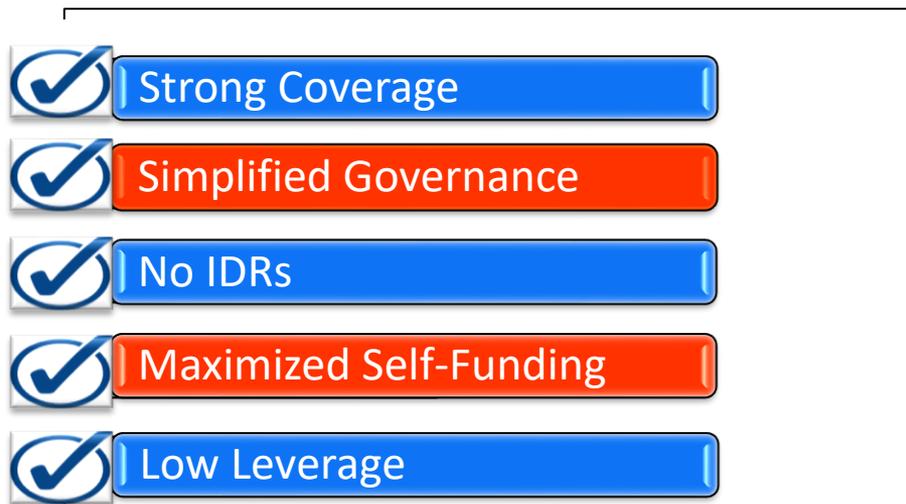
- **Regulatory priorities on the West Coast create high barriers to entry that make greenfield project permitting difficult, which increases the value of existing assets, like NuStar's**
- **Low-carbon fuel standards on the West Coast have created a niche market for clean products storage**
- **We have developed several low-cost, high-return bio-fuel capital projects at a number of our West Coast facilities to convert underutilized fuel oil storage assets to renewable fuels**
 - **These project allow us to capture market share at higher storage rates than attainable for non-LCFS products**



Looking Ahead to 2019



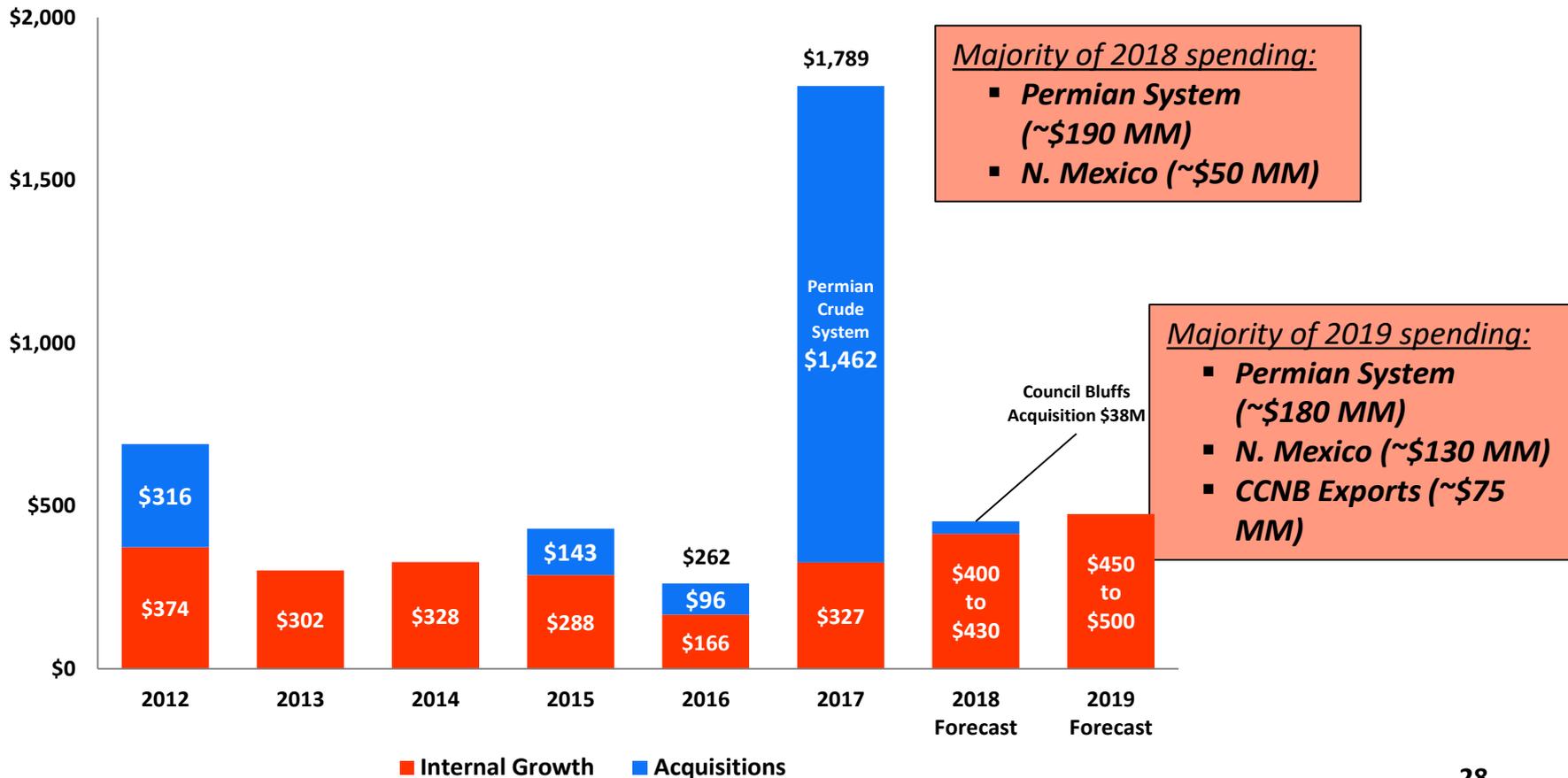
- Last week, we closed on the sale of our UK/European assets for \$270 million, and, with that, completed our 2018 plan to reach:

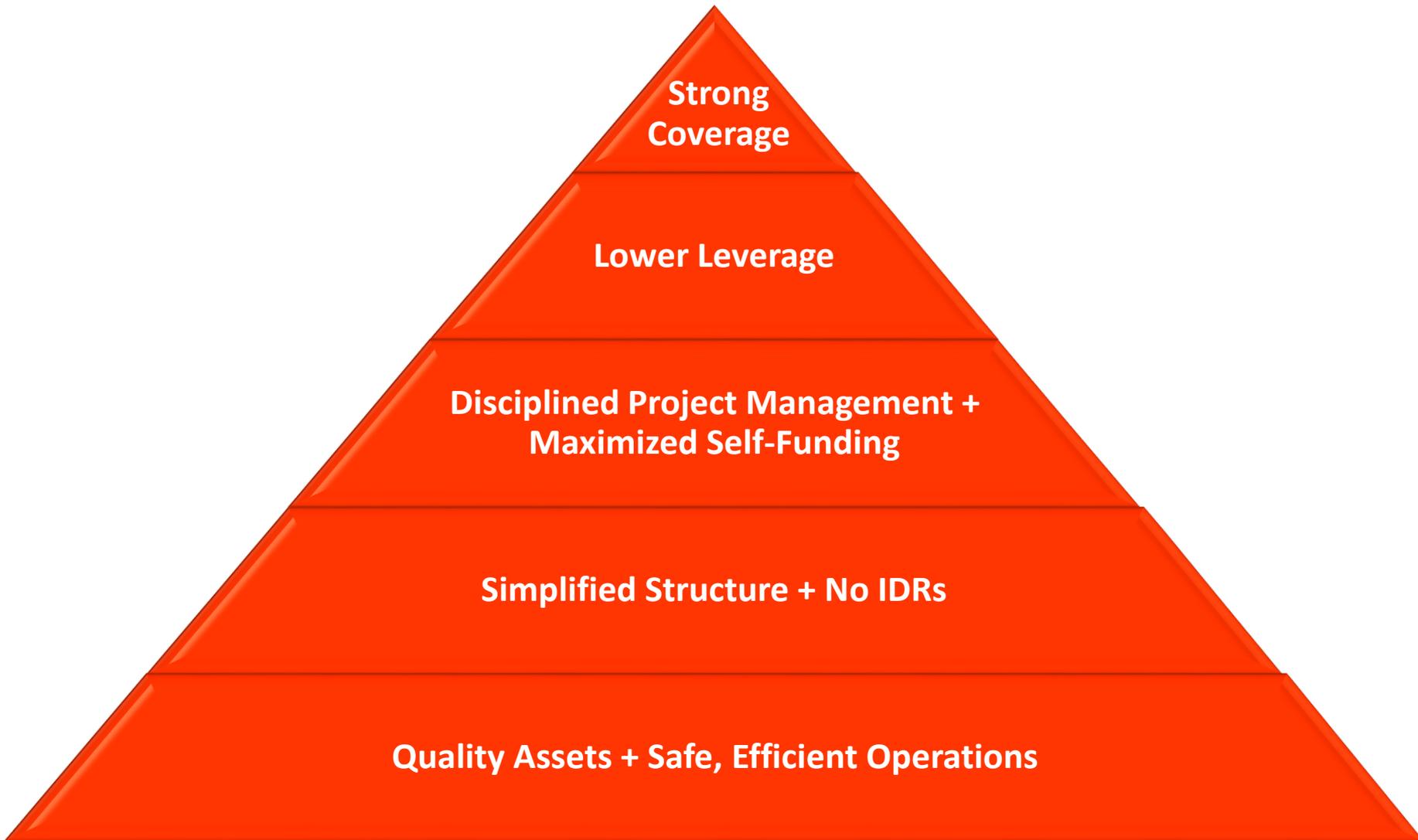


- By selling non-strategic assets to improve our leverage in 2018, we are able to both reduce our leverage now and redeploy capital to invest in low multiple projects to produce growth and strengthen our coverage in the future
- We plan to continue to lowering our leverage in 2019

● **We are carefully evaluating projects and managing costs to ensure two things:**

1. We stay within our means
2. We continue to grow our EBITDA with high-return projects







Appendix

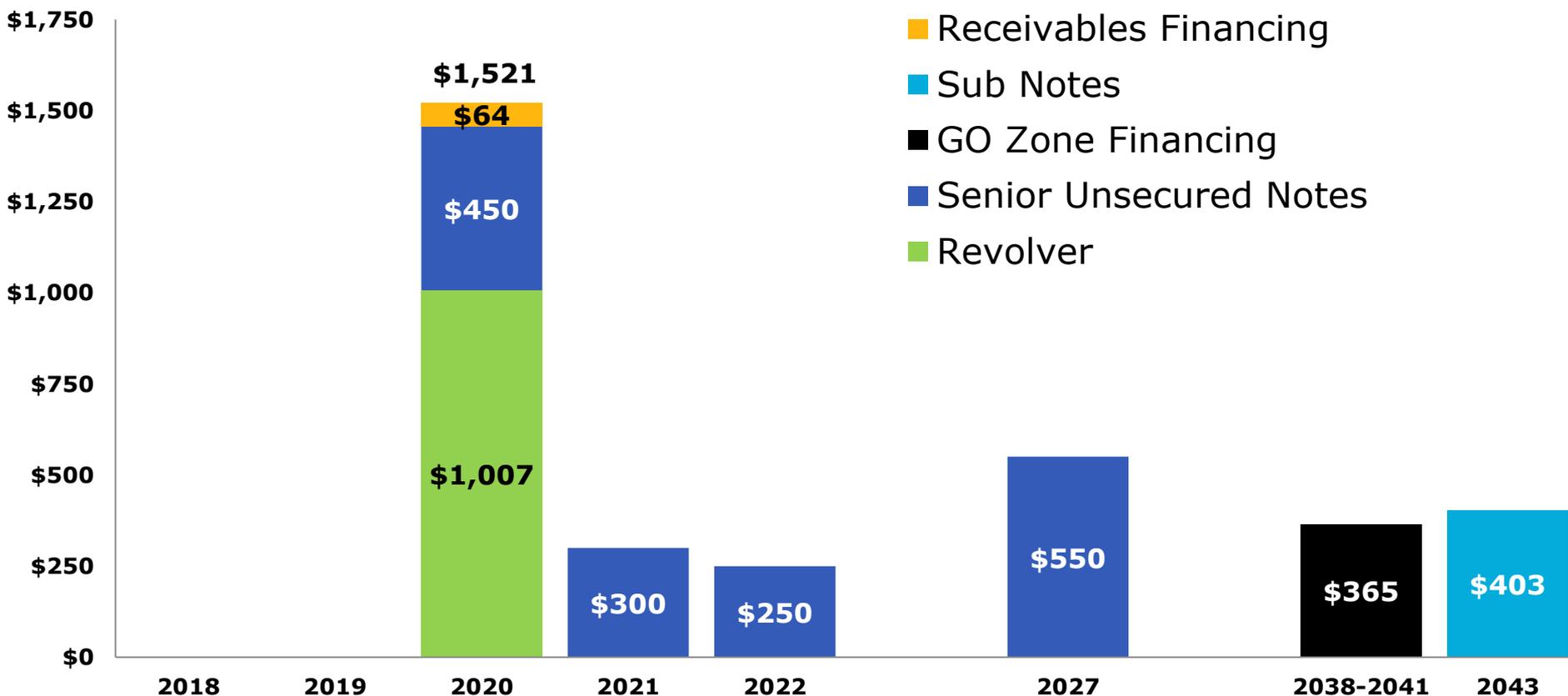


Debt Maturity Schedule

(as of September 30, 2018)



● We have no significant maturities until 2020



- We repaid our \$350 million 7.65% senior unsecured notes that matured in April with our revolver, but we plan to issue up to \$500 million new senior unsecured notes
- We will use proceeds from sale of European assets to further pay down revolver by EOY

Capital Structure as of September 30, 2018

(\$ in Millions)



\$1.75 billion Credit Facility	\$1,007	Series D Preferred Units	\$560
NuStar Logistics Notes (4.75%)	250	Series A, B and C Preferred Units	\$756
NuStar Logistics Notes (4.80%)	450	Common Equity, General Partner and AOCI	<u>1,591</u>
NuStar Logistics Notes (5.625%)	550	Total Equity	2,907
NuStar Logistics Notes (6.75%)	300	Total Capitalization	<u>\$6,294</u>
NuStar Logistics Sub Notes	403		
GO Zone Bonds	365		
Receivables Financing	64		
Short-term Debt & Other	<u>(2)</u>		
Total Debt	\$3,387		

● As of September 30, 2018:

- ☐ Credit Facility availability ~\$564 million
- ☐ Debt to EBITDA ratio¹ 4.5x

Reconciliation of Non-GAAP Financial Information



NuStar Energy L.P. utilizes financial measures, such as earnings before interest, taxes, depreciation and amortization (EBITDA), distributable cash flow (DCF) and distribution coverage ratio, which are not defined in U.S. generally accepted accounting principles (GAAP). Management believes these financial measures provide useful information to investors and other external users of our financial information because (i) they provide additional information about the operating performance of the partnership's assets and the cash the business is generating, (ii) investors and other external users of our financial statements benefit from having access to the same financial measures being utilized by management and our board of directors when making financial, operational, compensation and planning decisions and (iii) they highlight the impact of significant transactions.

Our board of directors and management use EBITDA and/or DCF when assessing the following: (i) the performance of our assets, (ii) the viability of potential projects, (iii) our ability to fund distributions, (iv) our ability to fund capital expenditures and (v) our ability to service debt. In addition, our board of directors uses a distribution coverage ratio, which is calculated based on DCF, as one of the factors in its compensation determinations. DCF is a widely accepted financial indicator used by the master limited partnership (MLP) investment community to compare partnership performance. DCF is used by the MLP investment community, in part, because the value of a partnership unit is partially based on its yield, and its yield is based on the cash distributions a partnership can pay its unitholders.

None of these financial measures are presented as an alternative to net income, or for any period presented reflecting discontinued operations, income from continuing operations. They should not be considered in isolation or as substitutes for a measure of performance prepared in accordance with GAAP. For purposes of segment reporting, we do not allocate general and administrative expenses to our reported operating segments because those expenses relate primarily to the overall management at the entity level. Therefore, EBITDA reflected in the segment reconciliations exclude any allocation of general and administrative expenses consistent with our policy for determining segmental operating income, the most directly comparable GAAP measure.

Reconciliation of Non-GAAP Financial Information (continued)



The following is a reconciliation of operating (loss) income to EBITDA for the Permian Crude System (in thousands of dollars):

	Three Months Ended						Projected for the Three Months Ended
	June 30, 2017	September 30, 2017	December 31, 2017	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018
Operating (loss) income	\$ (3,424)	\$ 1,050	\$ 650	\$ (1,847)	\$ 3,605	\$ 11,546	\$ 12,000
Plus depreciation and amortization expense	10,227	11,005	13,165	13,477	15,059	15,235	17,000
EBITDA	<u>\$ 6,803</u>	<u>\$ 12,055</u>	<u>\$ 13,815</u>	<u>\$ 11,630</u>	<u>\$ 18,664</u>	<u>\$ 26,781</u>	<u>\$ 29,000</u>

Reconciliation of Non-GAAP Financial Information (continued)



The following is the reconciliation for the calculation of our Consolidated Debt Coverage Ratio, as defined in our revolving credit agreement (the Revolving Credit Agreement) (in thousands of dollars, except ratio data):

	For the Four Quarters Ended September 30, 2018
Net income	\$ 228,850
Interest expense, net	187,334
Income tax expense	13,117
Depreciation and amortization expense	294,168
EBITDA	723,469
Other income (a)	(81,688)
Equity awards (b)	8,026
Material project adjustments and other items (c)	3,424
Consolidated EBITDA, as defined in the Revolving Credit Agreement	\$ 653,231
Total consolidated debt	\$ 3,399,533
NuStar Logistics' floating rate subordinated notes	(402,500)
Proceeds held in escrow associated with the Gulf Opportunity Zone Revenue Bonds	(41,476)
Consolidated Debt, as defined in the Revolving Credit Agreement	\$ 2,955,557
Consolidated Debt Coverage Ratio (Consolidated Debt to Consolidated EBITDA)	4.5x

(a) Other income is excluded for purposes of calculating Consolidated EBITDA, as defined in the Revolving Credit Agreement.

(b) This adjustment represents the non-cash expense related to the vestings of equity-based awards with the issuance of our common units.

(c) This adjustment represents the percentage of the projected Consolidated EBITDA attributable to any Material Project and other noncash items, as defined in the Revolving Credit Agreement.