

Forward-Looking Statements

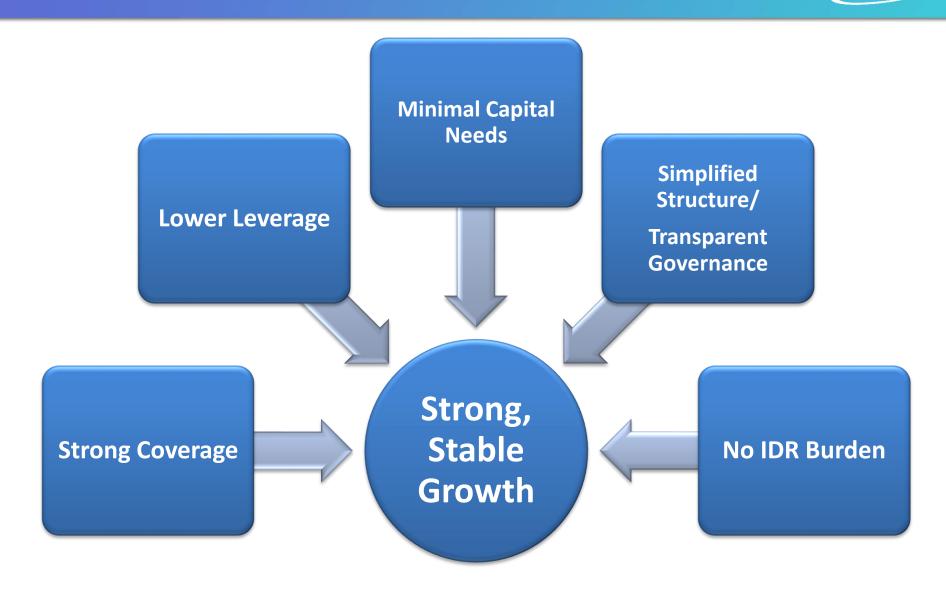


Statements contained in this presentation other than statements of historical fact are forward-looking statements. While these forward-looking statements, and any assumptions upon which they are based, are made in good faith and reflect our current judgment regarding the direction of our business, actual 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.



With Our Simplification Complete, We Have Achieved the Five Characteristics Critical to MLP Success as Markets Recover



Our Newly Simplified Structure: One Public Company, No IDRs





NYSE: NS

IPO Date: 4/16/2001

Common Unit Price (8/10/18): \$28.64

Annualized Distribution/Common Unit: \$2.40

Yield (8/10/18): 8.4%

Market Capitalization: \$3.1 billion

Enterprise Value: \$7.8 billion

Credit Ratings

Moody's: Ba2/Negative

S&P: BB/Negative

Fitch: BB/Negative

NuStar Has a Broad, Diverse Portfolio of Assets



Current Profile

- Volumes Handled⁽¹⁾:
 - > >1.4MM BPD pipeline volumes
 - > >330M BPD storage throughput terminal volumes
- ☐ Total Pipeline Miles: ~9,700
- ☐ Total Storage Capacity:~97MM bbls
- ☐ Total Enterprise Value: ~\$8B
- ☐ Total Assets: ~\$7B

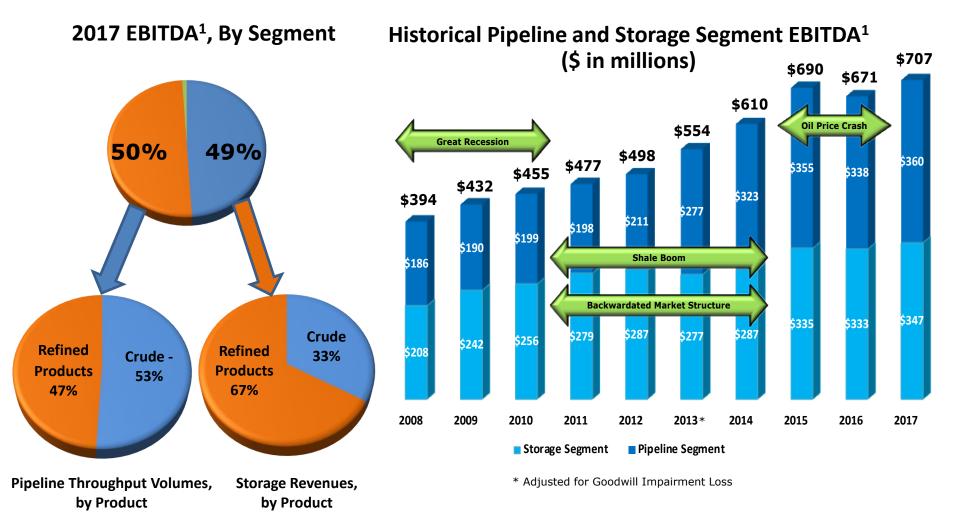
Key Takeaways:

- ☐ Highly integrated U.S. crude oil pipeline & terminal system
- Minimal direct exposure to commodity prices
- ☐ Significant crude oil midstream footprint in the Midland Basin of the Permian



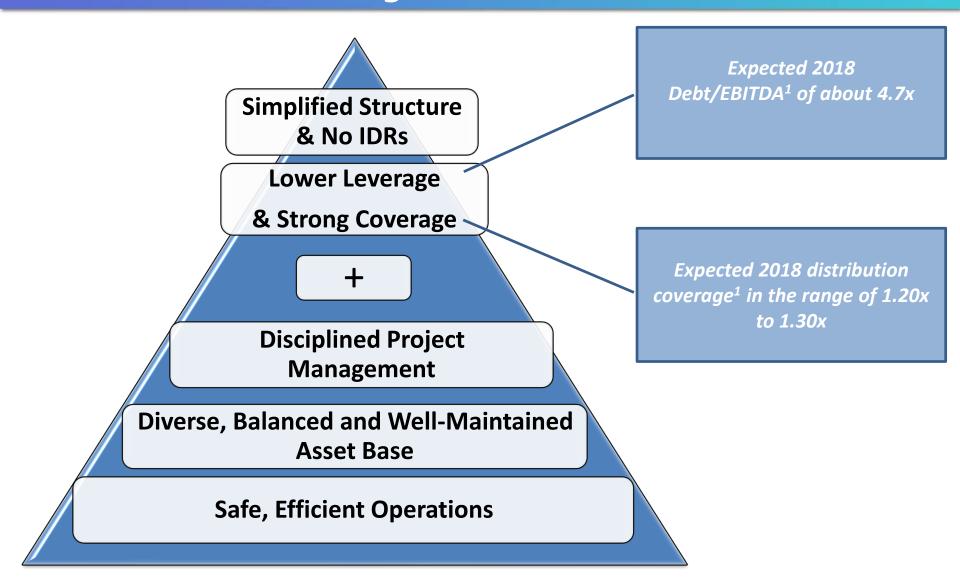
NuStar's Assets are Well-Balanced and Have Performed Consistently, Through Market Challenges





We Are Well-Positioned to Build on Our Foundational Strengths ...







The Permian Phenomenon





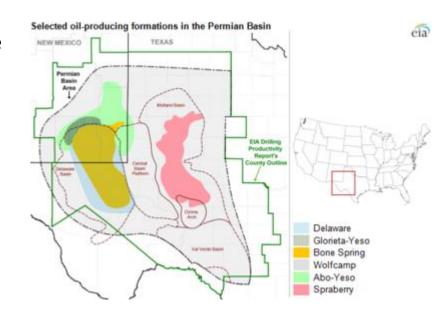
- □ A pool of more recoverable oil than any field in the world except for Saudi Arabia's Ghawar
- ☐ 250 miles wide, 300 miles long (75,000 square miles)
- ☐ The Wolfcamp Formation, all by itself, is estimated to hold 20 billion barrels of oil

The world's hottest oil basin

- ☐ Many major U.S. 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 **55% of nation's active oil rigs**
- If it were a standalone country, the Permian Basin would already rank #7 among the world's top liquids producers

The Basin's growth projections are unprecedented

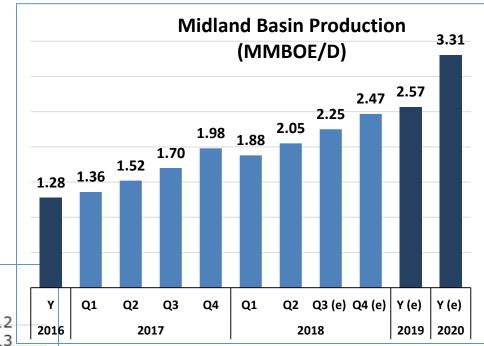
- ☐ Expected to rise to a record 3.5 million barrels of oil per day by year end, over 25% of nation's output
- $lue{}$ Could reach 5.0 million barrels a day by the end of 2020, more than either Iran or Iraq
- Expected to surge to **8.0-10.0 million barrels per day over next decade**, potentially surpassing all OPEC members

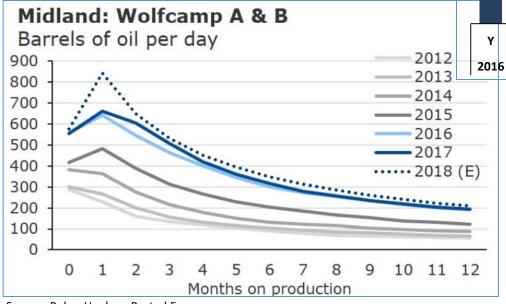


Advances in Drilling Activity and Technology Are Driving the Basin's Unparalleled Growth



- Permian Basin rig count, now 485, has grown from 342 or 42%, since we acquired our system last May¹
- The basin's record-level DUCs will baseload 2018 completion activity, and experts predict >600mb/d growth in 2018





As techniques and technology have evolved, producers have improved well performance, reflected in higher initial production rates (IP) and estimated ultimate recovery (EUR)

Source: Baker Hughes, Rystad Energy

Producers Remain Bullish on Permian Growth, Strength & Resiliency





August 9, 2018 Second Quarter 2018 Conference Call

"The second quarter was another strong quarter for Diamondback as we continued our operational excellence by **growing production**10% quarter-over-quarter..."

"But in general on the Midland Basin side, we complete or we drill roughly 22 wells per rig per year, and we drill longer and longer laterals on average each year..."



August 8, 2018 Second Quarter 2018 Conference Call

""On the well front, we just wanted to point out as an example that we continue to show impressive performance. The example in particular here is the Wolfcamp D..." "And numbers are sort of staggering. About a 75% improvement over the early life of these wells compared to the earlier style completions that were done say 3 and 4 years ago in the exact same area."



August 2, 2018 Second Quarter 2018 Conference Call

"With nearly half the drilling rigs and completion crews in the country running in the Permian Basin, the region is as busy as we've ever seen. We estimate that more than \$50 billion in capital will be invested to drill and complete wells in the Permian in 2018"



August 8, 2018 Second Quarter 2018 Conference Call

"We surged past 100,000 Boe per day during the second quarter, extending a remarkable run of production growth that is unmatched in the industry."

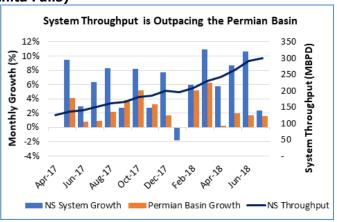
"With our rigs and crews well-seasoned and running smoothly, we're confident that we can sustain our drilling and completion performance while spreading facility cost over more wells and taking steps towards an optimized full-scale development approach."

Source: Earnings Call Transcripts

Our Permian Crude System Continues to Prove Itself – "Core of the Core"



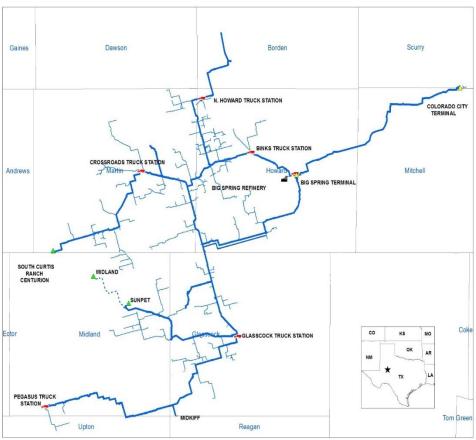
- Our system throughput is now 300,000 BPD, up 140% since the acquisition
 - □ Permian overall up 46% in same period
- Based on our producer projections, we expect our 2018 exit rate to be 360,000-380,000 BPD
- Since last May, we have:
 - □ Constructed ~200 miles of pipe
 - Added 20,000 dedicated acres
 - > We expect 82 new wells on this additional acreage, through 2019
 - ☐ Increased the number of well connection sites on our system from 102 to 173
 - Recently approved projects to connect to another 40 sites
- We project the System's expected EBITDA to more than double from 2018 to 2020
- We are constructing a 10-bay truck rack with capability to load 30,000 BPD
 - ☐ Evaluating whether to construct a second truck rack with up to 10,000 BPD of loading capacity
- We are evaluating additional connections, including connecting Wichita Falls Crude Pipeline to Sunrise Expansion (Colorado City to Wichita Falls)



Source: EIA Drilling Productivity Report

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

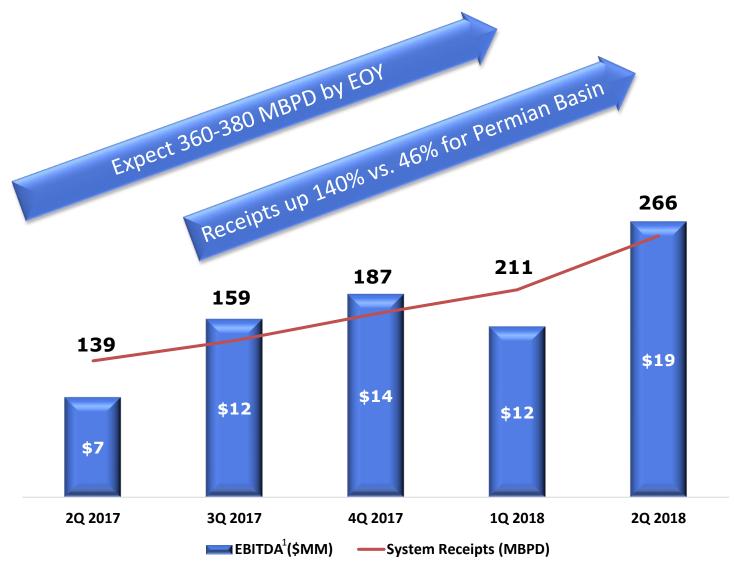
□ ~700 miles of pipeline with 460,000 BPD of capacity, 1MM barrels of storage capacity, over 500,000 dedicated acres, as well as 5MM acres of Areas of Mutual Interest. or AMI



- The system provides customers with excellent access to multiple downstream end markets
 - Delivery points and flow assurance into Big Spring, Midland and Colorado City

Our Permian System's Receipts and EBITDA Are Growing Rapidly





Source: EIA Drilling Productivity Report

We are Focused on Three Key Objectives to Continue to Realize Our System's Growth Potential



Providing Flow Assurance

- Working to match producers with downstream markets with "firm" space
- Identifying new shippers and marketers with downstream pipeline capacity
- Completing truck loading projects to add new takeaway capacity
- Working to connect to multiple new takeaway pipelines

Developing Our Existing System

- Anticipate building another ~60 new well connections next year
- Completing connections to Enterprise's Midland Terminal and Plains' SunRise Pipeline
- Developing expansion projects to increase our system's capacity and efficiency

Expanding On Our Reach

- Continuing to bring new volumes from existing producers through interconnects and dedicated acreage
- Leveraging our Permian Crude System to benefit other NuStar assets, including our South Texas System, Corpus Christi North Beach Terminal and Wichita Falls pipelines





Northern Mexico
Refined Product
Supply

St. James Terminal
Unit Train Assets

West Coast

Terminals

Bio-Fuels Strategy

South Texas Crude
System &
North Beach Dock
Connections

We Have Executed Contracts to Support Northern Mexico Supply Projects



- Nuevo Laredo Project Valero Energy has recently announced their plans related to our projects to supply refined products to Nuevo Laredo via our Odem and Laredo pipeline systems
- Howard Energy Corpus Christi Connection Howard Energy has announced an open season for capacity on a pipeline to supply their Corpus Christi rail terminal via a connection to our Corpus Christi pipeline infrastructure



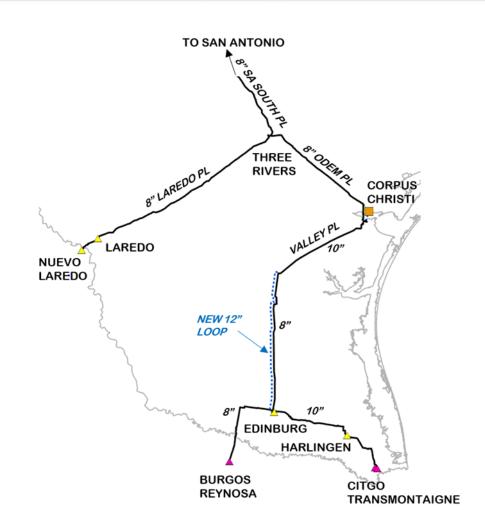


- Valley Pipeline Project We have secured a commitment from a large customer for the majority of the capacity of an expansion of our Valley Pipeline system. The customer will supply refined products to Mexico via a third party's Brownsville terminal
 - We will conduct an open-season to solicit commitments for additional capacity during in 3rd quarter

We Have Executed Contracts to Support Northern Mexico Supply Projects (continued)



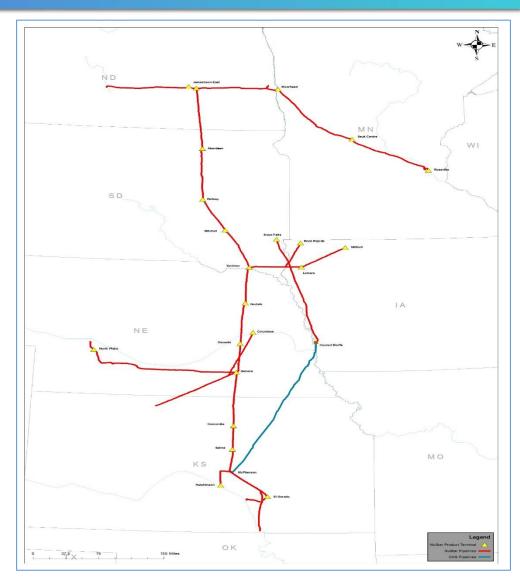
- These long-term throughput & deficiency contracts will support a series of healthy-return capital projects to:
 - ☐ Connect to pipelines and third-party rail facilities in Corpus Christi
 - Supply refined products to Nuevo Laredo via our Odem and Laredo pipeline systems
 - ☐ Upgrade our Nuevo Laredo Terminal
 - □ Expand our Valley Pipeline System to supply refined products to South Texas and Mexico via NuStar's and third party terminals in Edinburg, Harlingen and Brownsville



The Council Bluffs System That We Acquired in April is Performing Well as We Complete Our Integration



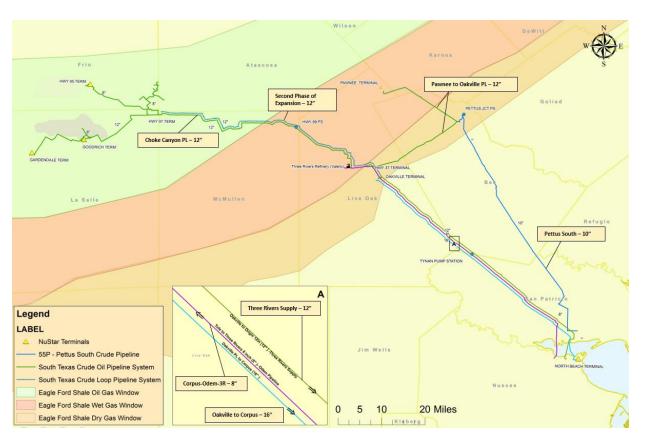
- In April, we closed on an immediately accretive \$38 million acquisition of CHS' Council Bluffs system, consisting of a 227-mile pipeline and 18 storage tanks
- Since April, we have worked to integrate the pipeline and terminal into our Central East system
 - We plan to complete our integration in early October, when we are scheduled to reactivate two intermediate pump stations at Abilene, Kansas and Tecumseh, Nebraska
- Even during our integration, we have achieved our expectations for volumes at the terminal rack and exceeded expectations for line throughput
- We expect to see increased volumes when the rack is opened to third-party customers
 - ☐ Third-party throughput will continue to increase as intermediate pump stations are reactivated



We have Recently Renewed T&D Commitments in South Texas



- Beginning next month, we will have T&D contracts for ~116,000 BPD
 - ☐ Renewed commitments totaling ~50,000 BPD with existing customers
 - Maintaining throughput by offering industry-leading service options and flexibility to attract/retain committed/walkup customers
- We are developing connections with several Permian long-haul pipelines to access storage/dock capacity at our Corpus Christi North Beach Terminal and potentially utilizing portions of our available pipeline capacity
 - ☐ Providing our shippers with optionality to Corpus Christi and beyond, utilizing available underutilized assets



Other Opportunities Across our Footprint



St. James Terminal

- Executed new contract for unit train off-loading due to widening differentials out of the Permian (expect 3-10 trains per month)
- Likely to be among the first of our facilities to benefit from a return to contango

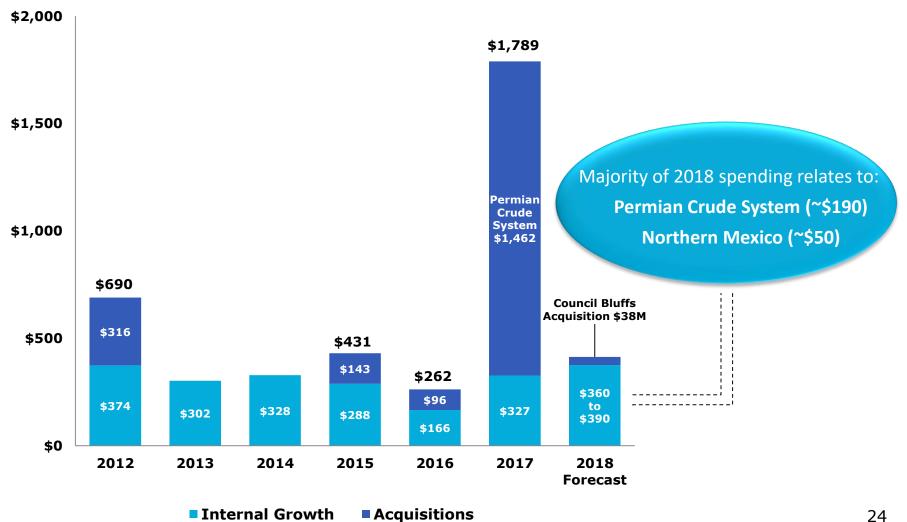
West Coast

 Several low-cost, high-return capital projects totaling ~\$60 million are executed and construction is nearing completion (as well as some that are still in development), related to opportunities for renewable diesel, bio diesel and ethanol



We Project 2018 Strategic Capital Spending Needs In the Range of \$360 to \$390 Million



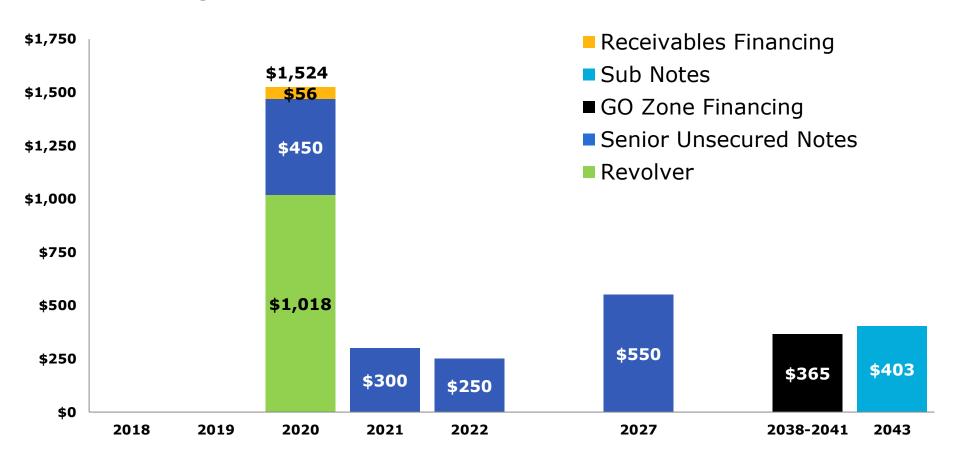


Debt Maturity Schedule

(as of June 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 by EOY

Capital Structure as of June 30, 2018 (\$ in Millions)



\$1.75 billion Credit Facility	\$1,018		
NuStar Logistics Notes (4.75%)	250	Series D Preferred Units – Mezzanine ²	\$371
NuStar Logistics Notes (4.80%)	450		
NuStar Logistics Notes (5.625%)	550	Partner's Equity	
NuStar Logistics Notes (6.75%)	300	Series A, B and C Preferred Units	\$756
NuStar Logistics Sub Notes	403	Common Equity, General Partner and AOCI	<u>1,701</u>
GO Zone Bonds	365	Total Partners' Equity	2,457
Receivables Financing	56	Total Capitalization	<u>\$6,271</u>
Short-term Debt & Other	<u>51</u>		
Total Debt	\$3,443		

As of June 30, 2018:

- ☐ Credit Facility availability ~\$554 million
- ☐ Debt to EBITDA ratio¹ 4.7x

^{1 -} Please see Appendix for reconciliations of non-GAAP financial measures to their most directly comparable GAAP measures



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.



The following is the non-GAAP 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 Ende June 30, 2018				
Net income	\$	219,306			
Interest expense, net		187,765			
Income tax expense		12,624			
Depreciation and amortization expense		287,646			
EBITDA		707,341			
Other income (a)		(75,642)			
Equity awards (b)		7,292			
Other items (c)		(1,637)			
Consolidated EBITDA, as defined in the Revolving Credit Agreement	\$	637,354			
Total consolidated debt	\$	3,454,998			
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	\$	3,011,022			

Consolidated Debt Coverage Ratio (Consolidated Debt to Consolidated EBITDA)

- (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 Consolidated EBITDA attributable to other noncash items, as defined in the Revolving Credit Agreement.

4.7x



The following is a reconciliation of EBITDA, DCF and distribution coverage ratio (in thousands of dollars, except ratio data):

	Projected for the Year Ended December 31, 2018			
Net income	\$ 210,000 - 235,000			
Interest expense, net	190,000 - 200,000			
Income tax expense	10,000 - 15,000			
Depreciation and amortization expense	290,000 - 300,000			
EBITDA	700,000 - 750,000			
Interest expense, net	(190,000) - (200,000)			
Reliability capital expenditures	(80,000) - (100,000)			
Income tax expense	(10,000) - (15,000)			
Unit-based compensation (a)	5,000 - 10,000			
Preferred unit distributions	(95,000) - (100,000)			
Insurance gain adjustment (b)	(44,000)			
Other items	5,000 - 20,000			
DCF available to common limited partners	\$ 291,000 - 321,000			
Distributions applicable to common limited partners	\$ 245,000 - 250,000			
Distribution coverage ratio (c)	1.2x - 1.3x			

- (a) We intend to satisfy the vestings of equity-based awards with the issuance of our common units. As such, the expenses related to these awards are considered non-cash and added back to DCF. Certain awards include distribution equivalent rights (DERs). Payments made in connection with DERs are deducted from DCF.
- (b) DCF excludes a portion of the insurance gain, which is added to DCF to offset reliability capital expenditures as they are incurred for hurricane repairs at our St. Eustatius terminal.
- (c) Distribution coverage ratio is calculated by dividing DCF available to common limited partners by distributions applicable to common limited partners.



The following is a reconciliation of operating income to EBITDA for the pipeline segment (in thousands of dollars):

	Years Ended December 31,										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Operating income	\$ 135,086	\$ 139,869	\$ 148,571	\$ 146,403	\$ 158,590	\$ 208,293	\$ 245,233	\$ 270,349	\$ 248,238	\$ 231,795	
Plus depreciation and amortization expense	50,749	50,528	50,617	51,165	52,878	68,871	77,691	84,951	89,554	128,061	
EBITDA	\$ 185,835	\$ 190,397	\$ 199,188	\$ 197,568	\$ 211,468	\$ 277,164	\$ 322,924	\$ 355,300	\$ 337,792	\$ 359,856	

The following is a reconciliation of operating income (loss) to EBITDA for the storage segment (in thousands of dollars):

	Years Ended December 31,									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Operating income (loss)	\$ 141,079	\$ 171,245	\$ 178,947	\$ 196,508	\$ 198,842	\$ (127,484)	\$ 183,104	\$ 217,818	\$ 214,801	\$ 219,439
Plus depreciation and amortization expense	66,706	70,888	77,071	82,921	88,217	99,868	103,848	116,768	118,663	127,473
EBITDA	\$ 207,785	\$ 242,133	\$ 256,018	\$ 279,429	\$ 287,059	\$ (27,616)	\$ 286,952	\$ 334,586	\$ 333,464	\$ 346,912
Impact from non-cash goodwill impairment co	narges					\$ 304,453				
Adjusted EBITDA						\$ 276,837				

The following is a reconciliation of operating income to EBITDA for the fuels marketing segment (in thousands of dollars):

December 31,			
	2017		
\$	5,982		
	P		
\$	5,982		
	Dec		

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

	Three Months Ended:										
	Jui	ne 30, 2017	Septen	nber 30, 2017	Decen	nber 31, 2017	Mar	ch 31, 2018		June 30, 2018	
Operating (loss) income	\$	(3,424)	\$	1,050	\$	650	\$	(1,847)	\$	3,605	
Plus depreciation and amortization expense		10,227		11,005		13,165		13,477		15,059	
EBITDA	\$	6,803	\$	12,055	\$	13,815	\$	11,630	\$	18,664	



Year Ended December 31, 2017

The following are the non-GAAP reconciliations of net income to EBITDA and the calculation of EBITDA for each of our segments as a percentage of total segment EBITDA (in thousands of dollars, except percentage data):

	Teal Linded December 31, 2017				
		Consolidated			
Net income	\$	147,964			
Interest expense, net		173,083			
Income tax expense		9,937			
Depreciation and amortization expense		264,232			
EBITDA		595,216			
General and administrative expenses		112,240			
Other expense, net		5,294			
Segment EBITDA	\$	712,750			
		Segment EBITDA	Segment Percentage (a)		
Pipeline segment (see previous slide for EBITDA reconciliation)	\$	359,856	50%		
Storage segment (see previous slide for EBITDA reconciliation)		346,912	49%		
Fuels marketing segment (see previous slide for EBITDA reconciliation)		5,982	1%		
Segment EBITDA	\$	712,750	100%		

⁽a) Segment percentage calculated as segment EBITDA for each segment divided by total segment EBITDA.