American Midstream Partners, LP Form 424B2 January 24, 2014

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Filed Pursuant to Rule 424(b)(2) Registration No.: 333-183818

PROSPECTUS SUPPLEMENT (To Prospectus dated November 27, 2013)

American Midstream Partners, LP

3,400,000 Common Units Representing Limited Partner Interests

We are offering 3,400,000 common units representing limited partner interests in American Midstream Partners, LP.

Our common units trade on the New York Stock Exchange under the symbol "AMID." The last reported trading price of our common units on January 22, 2014 was \$27.86.

Investing in our common units involves risk. See "Risk Factors" beginning on page S-15 of this prospectus supplement and on page 1 of the accompanying prospectus.

| | Per Common | | | | |
|---|---------------|-------|----|------------|--|
| | | | | | |
| | Unit | | | Total | |
| Price to the public | \$ | 26.75 | \$ | 90,950,000 | |
| Underwriting discounts and commissions ¹ | \$ | 1.07 | \$ | 3,638,000 | |
| Proceeds to American Midstream Partners, LP (before expenses) | \$ | 25.68 | \$ | 87,312,000 | |

Please read "Underwriting" for a description of all underwriting compensation payable in connection with this offering.

We have granted to the underwriters the option to purchase 510,000 additional common units from us on the same terms and conditions as set forth above if the underwriters sell more than 3,400,000 common units in this offering.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed on the adequacy or accuracy of this prospectus supplement. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the common units on or about January 29, 2014.

Barclays

UBS Investment Bank

Prospectus Supplement dated January 23, 2014

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Note: American Midstream Partners, LP owns a 50% non-operating interest in the Burns Point processing plant.

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ABOUT THIS PROSPECTUS SUPPLEMENT AND THE ACCOMPANYING PROSPECTUS

This document is in two parts. The first part is the prospectus supplement, which describes our business and the specific terms of this offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into the prospectus supplement and the accompanying prospectus. The second part is the accompanying prospectus, which gives more general information about the securities offered hereby and that we may offer hereafter from time to time but which do not apply to this offering. To the extent the information contained in this prospectus supplement differs or varies from the information contained in the accompanying prospectus or the documents incorporated by reference into the prospectus supplement or the accompanying prospectus, the information in this prospectus supplement controls. Before you invest in our common units, you should carefully read this prospectus supplement and the accompanying prospectus, in addition to the information contained in the documents we refer to under the heading "Information Incorporated by Reference" in this prospectus supplement and "Where You Can Find More Information" in the accompanying prospectus. This prospectus supplement is not an offer to sell or a solicitation of an offer to buy our common units in any jurisdiction where such offer or any sale would be unlawful.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein or in the accompanying prospectus were made solely for the benefit of the parties to such agreement and the third-party beneficiaries named therein, if any, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus to the extent it is consistent with this prospectus supplement, and any free writing prospectus that we may authorize to be delivered to you. Neither we nor the underwriters have authorized anyone to provide you with information that is different. If anyone provides you with different or inconsistent information, you should not rely on it. You should not assume that the information in this prospectus supplement, the accompanying prospectus or any free writing prospectus that we may authorize to be delivered to you, including any information incorporated by reference, is accurate as of any date other than the date indicated for such information. Our business, financial condition, results of operations and/or prospects may have changed since those dates.

SUMMARY

This summary highlights information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. It does not contain all of the information that you should consider before making an investment decision. You should carefully read this prospectus supplement, the accompanying prospectus, and the documents and information incorporated by reference into this prospectus supplement and the accompanying prospectus for a more complete understanding of our business and the terms of our common units, as well as the material tax and other considerations that are important to you in making your investment decision. You should pay special attention to the risks discussed under the caption "Risk Factors" beginning on page S-15 of this prospectus supplement, on page 1 of the accompanying prospectus, included in our Annual Report on Form 10-K for the year ended December 31, 2012, and in our subsequent Quarterly Reports on Form 10-Q, and under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Exhibit 99.1 to our Current Report on Form 8-K/A filed on November 22, 2013 and in our Exhibit 99.1 to our Current Report on Form 8-K filed on January 22, 2014, to determine whether an investment in our common units is appropriate for you. Unless otherwise specifically stated, the information presented in this prospectus supplement assumes that the underwriters have not exercised their option to purchase additional common units.

Throughout this prospectus supplement, when we use the terms "we," "our" or "us" we are referring either to American Midstream Partners, LP in its individual capacity or to American Midstream Partners, LP and its operating subsidiaries collectively, as the context requires. References in this prospectus supplement to our "general partner" refer to American Midstream GP, LLC.

American Midstream Partners, LP

Overview

We are a growth-oriented Delaware limited partnership that was formed in August 2009 to own, operate, develop and acquire a diversified portfolio of midstream energy assets. We are engaged in the business of gathering, treating, processing, fractionating, storing and transporting natural gas and natural gas liquids, or NGLs, through our ownership and operation of eleven gathering systems, two processing facilities, one fractionation facility, four terminal sites, three interstate pipelines and five intrastate pipelines. We also own a 50% undivided, non-operating interest in a processing plant located in southern Louisiana. Our primary assets, which are strategically located in Alabama, Georgia, Louisiana, Maryland, Mississippi, Tennessee and Texas, provide critical infrastructure that links producers and suppliers of natural gas to diverse natural gas and NGL markets, including various interstate and intrastate pipelines, as well as utility, industrial and other commercial customers. As of December 31, 2013, we operated approximately 2,100 miles of pipelines that gather and transport over 1 Bcf/d of natural gas and owned and operated approximately 1.3 million barrels of above-ground storage capacity across four marine terminal sites.

Our Operations

We manage our business and analyze and report our results of operations through three business segments:

Gathering and Processing. Our Gathering and Processing segment provides "wellhead-to-market" services to producers of natural gas and oil, which include transporting raw natural gas from various receipt points through gathering systems, treating the raw natural gas, processing raw natural gas to separate the NGLs from the natural gas, performing fractionation and selling or delivering pipeline quality natural gas as well as NGLs to various markets and pipeline systems.

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Transmission. Our Transmission segment transports and delivers natural gas from producing wells, receipt points or pipeline interconnects for shippers and other customers, which include local distribution companies ("LDCs"), utilities and industrial, commercial and power generation customers.

Terminals. Our Terminals segment provides above-ground storage services at our marine terminals that support various commercial customers, including commodity brokers, refiners, and chemical manufacturers, to store a range of products, including crude oil, bunker fuel, distillates, chemicals and agricultural products.

Business Strategies

Our principal business objective is to increase the quarterly cash distributions that we pay to our unitholders over time while ensuring the ongoing stability of our business. We expect to achieve this objective by executing the following strategies:

Capitalize on Organic Growth Opportunities Associated with Our Existing Assets. We continually seek to identify and evaluate economically attractive organic expansion and asset enhancement opportunities that leverage our existing asset footprint and strategic relationships with our customers. We expect to have opportunities to expand our systems into new markets and sources of supply, which we believe will make our services more attractive to our customers. We intend to focus on projects that can be completed at a relatively low cost and have potential for attractive returns.

Attract Additional Volumes to Our Systems. We intend to attract new volumes of natural gas to our systems from existing and new customers by continuing to provide superior customer service and aggressively marketing our services to additional customers in our areas of operation. We have available capacity on a majority of our systems and, as a result, we can accommodate additional volumes at a minimal incremental cost.

Pursue Strategic and Accretive Acquisitions. We plan to pursue accretive acquisitions of energy infrastructure and assets, through our sponsor or third parties, that are either complementary to our existing asset base or that we expect to provide attractive returns in new operating regions or business lines. We will pursue acquisitions in our areas of operation that we believe will allow us to realize operational efficiencies by capitalizing on our existing infrastructure, personnel and customer relationships. We will also seek acquisitions in new geographic areas or new business lines to the extent that we believe we can utilize our operational expertise to enhance our business with these acquisitions.

For example:

In November 2011, we acquired from Marathon Oil Company a fifty percent non-operating working interest in the Burns Point Plant. The Burns Point Plant is located in St. Mary Parish, Louisiana and is connected to our Quivira Gathering system.

In July 2012, we acquired from affiliates of Quantum Resources Management, LLC, a 87.4% undivided interest in the Chatom system, which we have subsequently increased to approximately 92%. The Chatom system is located in Alabama and is located 15 miles from our Bazor Ridge system.

In April 2013, we acquired the High Point system from the majority owner of our general partner. The High Point system consists of approximately 700 miles of natural gas pipeline assets located in southeast Louisiana and the shallow water and deep shelf of the Gulf of Mexico.

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In December 2013, we acquired Blackwater Midstream Holdings LLC, a developer and operator of petroleum, agricultural, and chemical liquid terminal storage facilities that owns and operates 1.3 million barrels of above-ground storage capacity across four marine terminal sites located in Westwego, Louisiana; Brunswick, Georgia; Harvey, Louisiana; and Salisbury, Maryland. These terminals sites provide storage services to support various commercial customers, including commodity brokers, refiners, and chemical manufacturers, to store a range of products, including crude oil, bunker fuel, distillates, chemicals and agricultural products.

Develop Strategic and Accretive New Asset Platforms. We selectively pursue the development of new complementary midstream asset platforms in our current operating regions and new midstream assets that provide attractive returns in regions where we currently do not have any assets. We believe it is important to our current and potential customers that we act as their midstream partner beyond our current asset footprint, so it is important to have the ability to develop new infrastructure for our customers where they deem it necessary in an accretive and economically attractive manner. As our customers move to produce new areas or develop new end use markets, we seek to provide solutions for their midstream needs. We intend to develop assets in our current lines of business, but may pursue opportunities in new business lines as well.

Manage Exposure to Commodity Price Risk. We manage our commodity price exposure by targeting a contract portfolio that is weighted towards firm transportation, fee-based and fixed-margin contracts while mitigating direct commodity price exposure by employing a prudent hedging strategy. For the nine months ended September 30, 2013 and the years ended December 31, 2012 and 2011, approximately 56.3%, 48.5% and 59.0%, respectively, of our gross margin was generated from firm transportation, fee-based and fixed-margin contracts that, together with our percent-of-proceeds contracts and hedging activities, generated relatively stable cash flows. With respect to our exposure to natural gas prices, we are generally long natural gas on certain of our systems and short natural gas on certain of our other systems, which mitigates the impact to us of fluctuations in the price of natural gas. For 2014, we have hedged approximately 11% of our anticipated 2014 NGL and condensate exposure. Looking forward, we will continue to evaluate hedging opportunities that enhance cash flow stability in 2014 and beyond amid volatile commodity markets.

Maintain Financial Flexibility and Conservative Leverage. We pursue a disciplined financial policy and seek to maintain a conservative capital structure that we believe will allow us to consider attractive growth projects and acquisitions even in challenging commodity price or capital markets environments.

Continue Our Commitment to Safe, Environmentally Sound Operations. The safety of our employees and the communities in which we operate is one of our highest priorities. We believe it is critical to handle natural gas, NGLs and condensate for our customers safely, while striving to minimize the environmental impact of our operations. To this end, we have a safety performance program, including an integrity management program, and planned maintenance programs to increase the safety, reliability and efficiency of our operations.

Competitive Strengths

We believe that we will be able to successfully execute our business strategies because of the following competitive strengths:

Well Positioned to Pursue Opportunities Overlooked by Competitors. Our size and flexibility, in conjunction with our geographically diverse asset base, positions us to pursue economically attractive growth projects and acquisitions that may not be large enough to be attractive to many

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of our larger competitors. Given the current size of our business, these opportunities may have a larger impact on us than they would have on our competitors and may provide us with material growth opportunities. In addition, as a result of our focus on customer service, we believe that we have unique insights into our customers' needs and are well situated to take advantage of organic growth opportunities that arise from those needs. The benefits of our size and flexibility apply not only to the opportunities around our current assets but to opportunities to develop new asset platforms as well, where we can pursue the development of new systems that will be impactful new assets to our company.

Diversified Asset Base. Our assets are diversified geographically and by business line, which contributes to the stability of our cash flows and creates a number of potential growth avenues for our business. We primarily operate in five states, have access to multiple sources of natural gas supply and service various interstate and intrastate pipelines as well as utility, industrial and other commercial customers. We believe this diversification provides us with a variety of growth opportunities and mitigates our exposure to reduced activity in any one area.

Strategically Located Assets. Our assets are located in areas where we believe there will be opportunities to access new natural gas supplies and to capture new customers that are underserved by our competitors. We continue to see drilling activity on and around our systems, and we believe that our assets are strategically positioned to capitalize on the resurgent drilling activity, increased demand for midstream services and growing commodity consumption in the Gulf Coast and Southeast U.S. regions. This belief is based on:

the proximity of our gathering and transmission systems to newly producing wells and the relatively lower cost to connect to our systems compared to those farther away;

the available capacity of our systems, coupled with an ability to add capacity economically; and

the fact that many of our systems have multiple downstream interconnects that provide our customers with multiple market delivery options.

Affiliation with ArcLight Capital. Our general partner is controlled by ArcLight Capital Partners, LLC ("ArcLight"), which is an energy-focused investment firm with a history of investing in growth-oriented midstream companies. We believe this relationship will continue to provide us with significant business opportunities. For example, see "Recent Developments Pending Asset Purchase" and "Blackwater Acquisition and Related Public Equity Offering." We believe we will have future opportunities to make additional acquisitions with or directly from ArcLight as well as form joint ventures with it; however, we cannot say with any certainty which, if any, of these opportunities may be made available to us, or if we will choose to pursue any such opportunity.

Focus on Providing Excellent Customer Service. We view our strong customer relationships as one of our key assets and believe it is critical to maintain operational excellence and ensure best-in-class customer service and reliability. Furthermore, we believe our entrepreneurial culture and smaller size relative to our peers enables us to offer more customized and creative solutions for our customers and to be more responsive to their needs. We believe our customer focus will enable us to capture new opportunities and expand into new markets.

Experienced Management and Operating Teams. Our executive management team has an average of more than 25 years of experience in the midstream energy industry. The team possesses a comprehensive skill set to support our business and enhance unitholder value through asset optimization, accretive development projects and acquisitions. In addition, our field supervisory team has operated our assets for an average of more than 20 years. We believe that our field employees' knowledge of the assets will further contribute to our ability to execute our business strategies. Furthermore, the interests of our executive management and operating

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teams are strongly aligned with those of common unitholders, including through their ownership of common units and our Long-Term Incentive Plan.

Recent Developments

Pending Asset Purchase

On January 22, 2014, we, through our wholly owned subsidiary, American Midstream, LLC, entered into an agreement (the "Lavaca Purchase Agreement") with ArcLight Energy Partners Fund V, L.P., a Delaware limited partnership, to purchase one of its wholly owned subsidiaries, HPIP Lavaca, LLC ("Lavaca LLC"), a Delaware limited liability company (the "Lavaca LLC Acquisition"). The only asset of Lavaca LLC is the asset purchase agreement described in the paragraph below. The aggregate purchase price for the Lavaca LLC Acquisition is \$1,000. The closing of the Lavaca LLC Acquisition is conditional on the closing of this offering and certain other customary conditions.

On December 13, 2013, Lavaca LLC entered into a Purchase and Sale Agreement (the "PVA Asset Purchase Agreement") to acquire certain natural gas gathering assets, gas lift assets and related real property interests from a subsidiary of Penn Virginia Corporation (NYSE: PVA) ("PVA") and certain other parties (the "PVA Asset Acquisition"). The assets to be acquired pursuant to the PVA Asset Purchase Agreement include approximately 120 miles of high- and low-pressure pipelines ranging from 4 to 8 inches in diameter with over 9,000 horsepower of leased compression, and associated facilities located in the Eagle Ford shale in Gonzales and Lavaca Counties, Texas (the "PVA Assets"). Construction of the PVA Assets began in 2011 and the related system currently has operating capacity of approximately 90 million cubic feet per day (MMcf/d). This system is currently flowing more than 40 MMcf/d between sales volume and gas lift, and we expect an increase in volumes throughout 2014 and thereafter. Production gathered by this system is compressed and delivered to a third-party for processing or redelivered to PVA, which is currently operating six to seven rigs on this system, for gas lift.

The aggregate purchase price for the PVA Asset Acquisition is approximately \$100 million, plus purchase price adjustments for certain capital costs and expenses incurred by PVA between October 1, 2013 and the closing date. Payment of the aggregate purchase price for the PVA Asset Acquisition will become our obligation upon the closing of the Lavaca LLC Acquisition described above. We expect to fund payment of the aggregate purchase price for the PVA Asset Acquisition with approximately \$30 million from a private placement of our newly-designated Series B PIK Units to High Point Infrastructure Partners, LLC, an ArcLight affiliate and the owner of 90% of our general partner ("HPIP") and our general partner and approximately \$80 million from the net proceeds from this offering. The PVA Asset Purchase Agreement contains customary representations and warranties and covenants, including provisions for indemnification, subject to the limitations described in the PVA Asset Purchase Agreement. The closing of the PVA Asset Acquisition, which is expected to occur in the first quarter of 2014, is subject to customary closing conditions.

In connection with the PVA Asset Acquisition, Lavaca LLC will enter into a Construction and Field Gathering Agreement (the "Construction and Field Gathering Agreement") with a subsidiary of PVA, pursuant to which it will be obligated, at its cost and expense, to construct, operate, and maintain additional gathering pipelines for connection to certain current and future PVA properties (excluding the PVA Assets) within an approximate 65,000 acre dedication area. While we cannot guarantee with any certainty the future costs associated with such construction, operation, and maintenance, we currently expect that the aggregate capital expenditures over the next five years associated with this expansion construction will be \$60-70 million, including approximately \$30 million to be incurred in 2014. We expect to initially fund these costs with borrowings under our credit facility. In exchange for the obligation to construct these gathering assets, Lavaca LLC will gather all of PVA's operated, non-

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dedicated gas production within the approximate 65,000 acre dedication area for a period of 25 years from closing.

Proposed Issuance of Series B PIK Units

On January 22, 2014, we entered into a Series B Unit Purchase Agreement (the "Series B Unit Purchase Agreement") with American Midstream GP, LLC, our general partner, and High Point Infrastructure Partners, LLC, pursuant to which we agreed to issue in a private placement 1,168,225 newly-designated Series B Units (the "Series B PIK Units") representing limited partnership interests in us for approximately \$30 million in aggregate proceeds (the "Series B Issuance"). The Series B PIK Units will convert into common units on a one-for-one basis on the second anniversary of the initial issuance of the Series B PIK Units. The closing of the Series B Issuance is conditional on the closing of this offering and subject to certain other customary conditions.

In connection with issuance of the Series B PIK Units, we will enter into Amendment No. 2 to our Fourth Amended and Restated Agreement of Limited Partnership (the "Amendment"). The Amendment establishes the terms of the Series B PIK Units and provides that each Series B PIK Unit will have the right to share in distributions from us on a pro rata basis with holders of our common units. All or any portion of each distribution payable in respect of the Series B PIK Units (the "Series B PIK Unit Distribution") may, at our election, be paid in additional Series B PIK Units as further described in the Amendment. To the extent any portion of the Series B PIK Unit Distribution is paid in Series B PIK Units for any quarter, the distribution to the holders of incentive distribution rights shall be reduced by that portion of the distribution that is attributable to the payment of those Series B PIK Units, as further described in the Amendment. In addition, the Amendment increases to six (from three) the number of registrations that we shall be required to effect upon demand by our general partner or any of its affiliates, subject to the terms and conditions contained in our Fourth Amended and Restated Agreement of Limited Partnership. The Series B PIK Units will have the same voting rights as if they were outstanding common units and will be entitled to vote as a separate class on any matters that materially adversely affect the rights or preferences of the Series B PIK Units in relation to other classes of partnership interests or as required by law.

Blackwater Acquisition and Related Public Equity Offering

On December 17, 2013, we completed the acquisition of Blackwater Midstream Holdings LLC ("Blackwater"), an owner, developer and operator of petroleum, agricultural, and chemical liquid terminal storage facilities (the "Blackwater Acquisition"). Blackwater owns and operates 1.3 million barrels of storage capacity across four terminal sites located in Westwego, Louisiana; Brunswick, Georgia; Harvey, Louisiana; and Salisbury, Maryland. These terminal sites provide storage services to support various commercial customers, including commodity brokers, refiners, and chemical manufacturers, to store a range of products, including crude oil, bunker fuel, distillates, chemicals and agricultural products.

In connection with the financing of the Blackwater Acquisition, on December 17, 2013, we completed a public offering of 2,568,712 common units, which included a partial exercise of the underwriter's option to purchase additional common units, at a price to the public of \$22.47 per unit, resulting in net proceeds of \$55.5 million.

In connection with the Blackwater Acquisition, we announced that our management intends to recommend to our board of directors an increase in our quarterly distribution of approximately two percent over our recently-announced quarterly distribution for the quarter ended December 31, 2013, beginning with the distribution for the first quarter of 2014.

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Equity Restructuring

Effective August 9, 2013, we entered into an Equity Restructuring Agreement with HPIP. As part of the Equity Restructuring Agreement, our 4,526,066 subordinated units and previous incentive distribution rights ("IDRs") (all of which were owned by our general partner, which is controlled by HPIP) were combined into and restructured as a new class of IDRs. Upon the issuance of the new IDRs, the subordinated units and former IDRs were cancelled. The new IDRs are allocated 85.02% to HPIP and 14.98% to our general partner in accordance with each party's respective capital contribution to us in connection with the combination and restructuring. The new IDRs entitle the holders of our incentive distribution rights to receive 48% of any quarterly cash distributions from operating surplus after our common unitholders have received the full minimum quarterly distribution (\$0.4125 per unit) for each quarter plus any arrearages from prior quarters (of which there are currently none).

The Equity Restructuring Agreement also provided for the issuance of warrants to our general partner to purchase up to 300,000 of our common units at an exercise price of \$0.01 per common unit. These warrants were cancelled on November 11, 2013, effective as of August 29, 2013. These warrants were exercisable on the later of (i) 18 months from the equity restructuring completion date and (ii) the date that the volume weighted average trading price of our common units on the New York Stock Exchange exceeded \$25.00 for 30 consecutive trading days. The warrants contained customary anti-dilution and other protections. These warrants were being held by our general partner for subsequent conveyance to AIM Midstream Holdings, LLC, or AIM, the owner of the Class B interest of our general partner, upon release of certain funds from escrow. In connection with the cancellation of the warrants on November 11, 2013, our general partner authorized the issuance of replacement warrants in an amount and on terms substantially identical to the cancelled warrants, with such issuance (unless otherwise ordered by a court) to be made to our general partner or HPIP depending upon the circumstances surrounding the release of cash from an escrow account deposited in connection with the Purchase Agreement entered into between HPIP and AIM on April 15, 2013.

Following the announcement of the Equity Restructuring Agreement, AIM filed an action in Delaware Chancery Court against HPIP, our general partner and us and is seeking either rescission of the Equity Restructuring Agreement or, in the alternative, monetary damages. While we cannot predict the ultimate outcome of this litigation, we intend to vigorously defend ourselves against this action, and we do not believe that the dispute, even if determined adversely against us, would have a material effect on our financial position, results of operations or cash flows.

Fourth Quarter Distribution

On January 22, 2014, we announced a distribution of \$0.4525 per unit for the quarter ended December 31, 2013, or \$1.81 per unit on an annualized basis, which will be paid on February 14, 2014 to unitholders of record on February 7, 2014. We expect that the common units issued in this offering will be entitled to receive the distribution to be paid on February 14, 2014.

High Point FERC Orders

As discussed in our Form 10-K, for the year ended December 31, 2012, the High Point midstream assets that we acquired from HPIP were subject to additional orders from the Federal Energy Regulatory Commission (the "FERC"), including potential refund liability. On December 19, 2013, FERC issued an Order on Compliance Filings for High Point Gas Transmission, LLC (the "December 2013 Order"), approving its jurisdictional rates and final accounting for newly acquired transmission assets. FERC also removed the potential refund condition previously imposed related to the acquired assets, including those assets that were functionalized as gathering. Intervenors with party status in the proceeding may file requests for rehearing of the December 2013 Order; if no requests for rehearing

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are filed within 30 business days following issuance of the December 2013 Order, the December 2013 Order becomes final.

Principal Executive Offices and Internet Address

Our principal executive offices are located at 1614 15th Street, Suite 300, Denver, Colorado 80202, and our telephone number is (720) 457-6060. Our website address is http://www.americanmidstream.com. We make our periodic reports and other information filed with or furnished to the Securities and Exchange Commission, or SEC, available, free of charge, through our website, as soon as reasonably practicable after those reports and other information are electronically filed with or furnished to the SEC. Information on our website or any other website is not incorporated by reference into this prospectus supplement and does not constitute a part of this prospectus supplement.

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Ownership of American Midstream Partners, LP

The chart below depicts our organization and ownership structure as of the date of this prospectus supplement and gives effect to this offering assuming no exercise of the underwriters' option to purchase additional common units. Our general partner has informed us that it intends to make a capital contribution to us in order to maintain its 1.4% general partnership interest in us. The table below does not give effect to this capital contribution, nor does it give effect to the Series B Issuance. Because the percentage interests below reflect only this offering, the percentage interests following the completion of all of the issuances currently contemplated will be different than those depicted below.

The Offering

Common units offered

3,400,000 common units.

3,910,000 common units if the underwriters exercise their option to purchase additional common units in full.

Common units outstanding after this offering

10,821,293 common units, or 11,331,293 common units if the underwriters exercise their option to purchase additional common units in full.

Series B PIK Units outstanding after Series B Issuance

1,168,225 Series B PIK Units.

Use of proceeds

We expect to receive net proceeds from this offering of approximately \$86.8 million (or approximately \$99.9 million if the underwriters' option to purchase additional common units is exercised in full) after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

We intend to use the net proceeds from this offering and from the contribution by our general partner to maintain its 1.4% general partner interest in us to partially fund the proposed PVA Asset Acquisition. See "Use of Proceeds." In the event that we do not consummate the PVA Asset Acquisition, we will use the net proceeds from this offering to repay a portion of the outstanding borrowings under our credit facility or for general partnership purposes.

If the underwriters exercise their option to purchase additional common units, we intend to use all the net proceeds from the sale of additional common units to repay a portion of the outstanding borrowings under our credit facility.

Cash distributions

Under our partnership agreement, we must distribute all of our cash on hand at the end of each quarter, less reserves established by our general partner in its sole discretion. We refer to this cash available for distribution as "Available Cash," and we define its meaning in our partnership agreement. Please see "Our Cash Distribution Policy" in the accompanying prospectus for a description of available cash.

On January 22, 2014 we announced a distribution of \$0.4525 per unit for the quarter ended December 31, 2013, or \$1.81 per unit on an annualized basis, which will be paid on February 14, 2014 to unitholders of record on February 7, 2014. We expect that the common units issued in this offering will be entitled to receive the distribution to be paid on February 14, 2014.

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If cash distributions to our unitholders exceed \$0.4125 per common unit in any quarter, and there are no arrearages in the payment of minimum quarterly distributions for prior quarters (of which there are currently none), the holders of our incentive distribution rights will receive 48% of the cash we distribute in excess of that amount. We refer to these distributions as "incentive distributions."

Estimated ratio of taxable income to distributions

We estimate that if you own the common units you purchase in this offering through the record date for distributions for the period ending December 31, 2016, you will be allocated, on a cumulative basis, an amount of federal taxable income for that period that will be 30% or less of the cash distributed to you with respect to that period. Please see "Material U.S. Federal Income Tax Consequences" on page S-21 for an explanation of the basis of this estimate.

Exchange listing

Our common units are traded on the New York Stock Exchange under the symbol "AMID."

Risk factors

Investing in our common units involves risks. See "Risk Factors" beginning on page S-15 of this prospectus supplement and on page 1 of the accompanying prospectus for information regarding risks you should consider before investing in our common units.

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Summary Consolidated Historical Financial and Operating Information

We derived the following summary historical consolidated financial and operating data as of and for the periods indicated from our unaudited financial statements, which are incorporated by reference into this prospectus supplement from our Form 8-K filed on January 22, 2014, and our audited financial statements, which are incorporated by reference into this prospectus supplement from Exhibit 99.1 to our Current Report on Form 8-K filed on October 1, 2013. The summary historical balance sheet data as of December 31, 2010 has been derived from our audited financial statements not included or incorporated by reference into this prospectus supplement. The summary historical balance sheet data as of September 30, 2012 has been derived from our unaudited financial statements not included or incorporated by reference into this prospectus supplement. The following summary historical consolidated financial and operating data should be read in conjunction with the financial

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statements referenced above and the subsection entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in the filings referenced above.

| | As of and for the Nine Months Ended September 30, | | As I | l | | |
|--|--|----------------|-----------|-----------|-----------|--|
| | 2013 ¹ | 2012 | 2012 | 2011 | 2010 | |
| | | (in thousands) | | | | |
| Statement of Operations Data: | | | | | | |
| Total revenue | \$216,626 | \$141,580 | \$198,243 | \$227,719 | \$194,779 | |
| Operating expenses: | | | | | | |
| Purchases of natural gas, NGLs and condensate | 162,671 | 100,075 | 145,172 | 187,398 | 157,682 | |
| Direct operating expenses | 20,898 | 11,550 | 16,798 | 11,419 | 10,944 | |
| Selling, general and administrative expenses | 13,748 | 10,101 | 14,309 | 10,800 | 7,120 | |
| Advisory services agreement termination fee | | | | 2,500 | | |
| Transaction expenses | | | | 282 | 303 | |
| Equity compensation expense | 1,877 | 1,272 | 1,783 | 3,357 | 1,734 | |
| Depreciation expense | 22,271 | 15,722 | 21,284 | 20,449 | 19,904 | |
| Total operating expenses | 221,465 | 138,720 | 199,346 | 236,205 | 197,687 | |
| Gain on acquisition of assets | | | | 565 | | |
| Gain (loss) on involuntary conversion of property, plant and equipment | 343 | | (1,021) | | | |
| Gain on sale of assets, net | | 121 | 123 | 399 | | |
| Loss on impairment of property, plant and equipment | (15,232) | | | | | |

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