PROSPECTUS SUPPLEMENT (To Prospectus Dated March 9, 2017)

WESTWATER RESOURCES, INC.



\$22,000,000 of Common Stock plus 880,000 Commitment Shares

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering up to \$22,000,000 of shares of our common stock, par value \$0.001 per share ("common stock") to Aspire Capital Fund, LLC ("Aspire Capital") under a common stock purchase agreement entered into on September 25, 2017 (the "Purchase Agreement").

The shares of common stock offered under the Purchase Agreement include (i) 880,000 shares of common stock to be issued to Aspire Capital in consideration for entering into the Purchase Agreement (the "Commitment Shares"), and (ii) additional shares of common stock, which may be sold from time to time to Aspire Capital until and including March 25, 2020, with an aggregate offering price of up to \$22,000,000 (the "Purchase Shares"). The purchase price for the Purchase Shares will be based upon one of two formulas set forth in the Purchase Agreement depending on the type of purchase notice we submit to Aspire Capital from time to time

Our common stock is listed on the Nasdaq Capital Market under the symbol "WWR" and on the ASX under the symbol "WWR." On September 22, 2017, the last reported sale price of our common stock on the Nasdaq Capital Market was \$1.41 per share.

Investing in our securities involves a high degree of risk. You should read "Risk Factors" beginning on page S-3 of this prospectus supplement and the reports we file with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, incorporated by reference in this prospectus supplement, to read about factors to consider before purchasing our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is September 27, 2017.

We are responsible for the information contained and incorporated by reference in this prospectus supplement, the accompanying prospectus and any related free writing prospectus we prepare or authorize. We have not authorized anyone to provide you with different information, and we take no responsibility for any other information that others may give you. We are not making an offer of our securities in any jurisdiction where the offer is not permitted. The information in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference and any written communication from us specifying the final terms of the offering is only accurate as of the date of the respective documents in which the information appears. Our business, financial condition, results of operations and prospects may have changed since those dates. Information in this prospectus supplement updates and modifies the information in the accompanying prospectus.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of a registration statement on Form S-3 (File No. 333-216243) that we filed with the Securities and Exchange Commission (the "SEC") and that was declared effective by the SEC on March 9, 2017. Under this shelf registration process, we may, from time to time, offer common stock, debt securities, warrants and units, of which this offering is a part.

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of the common stock we are offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus dated March 9, 2017, including the documents incorporated by reference therein, provides more general information. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or in any document incorporated by reference that was filed with the Securities and Exchange Commission, or SEC, before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document incorporated by reference into this prospectus supplement and the accompanying prospectus — the statement in the document having the later date modifies or supersedes the earlier statement.

You should read this prospectus supplement, the accompanying prospectus, the documents incorporated by reference into this prospectus supplement and the accompanying prospectus, and any free writing prospectus that we may authorize for use in connection with this offering, in their entirety before making an investment decision. You should also read and consider the information in the documents to which we have referred you in the sections of this prospectus supplement entitled "Where You Can Find More Information" and "Information Incorporated by Reference."

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 in this prospectus supplement or the accompanying prospectus were made solely for the benefit of the parties to such agreement, 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 and covenants were accurate only as of the date when made; therefore, such representations, warranties and covenants should not be relied on as accurate representations of the current state of our affairs.

References to "WWR," "we," "our" and "us" in this prospectus supplement and the accompanying prospectus are to Westwater Resources, Inc. and its consolidated subsidiaries, unless the context otherwise requires. This document includes trade names and trademarks of other companies. All such trade names and trademarks appearing in this document are the property of their respective holders.

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents we have incorporated by reference contain forward-looking statements within the meaning of the federal securities laws. Forward-looking statements convey our current expectations or forecasts of future events. We intend such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

Forward-looking statements are generally identifiable by use of the words "estimate," "project," "believe," "intend," "plan," "anticipate," "expect" and similar expressions. These forward-looking statements include management's expectations regarding our adequacy of funding, liquidity, burn rate, exploration plans, reserves and mineralized uranium material, capital requirements, timing of receipt of mining permits and

access rights, acquisition or partnering opportunities, sales or exchanges, production capacity of mining operations for properties in the Republic of Turkey, South Texas, New Mexico, Utah and Nevada and planned dates for commencement of production at such properties. Our ability to predict results or the actual effect of future plans or strategies is inherently uncertain. Actual results could differ materially from those in forward-looking statements because of, among other reasons, the factors described below and in the periodic reports that we file with the SEC from time to time, including Forms 10-K, 10-Q and 8-K and any amendments thereto. The forward-looking statements are not guarantees of future performance. They are based on numerous assumptions that we believe are reasonable, but they are open to a wide range of uncertainties and business risks.

Key factors that could cause actual results to be different than expected or anticipated include, but are not limited to:

- the availability of capital to WWR;
- the spot price and long-term contract price of uranium and lithium;
- risks associated with our foreign operations;
- the ability of WWR to enter into and successfully close acquisitions, dispositions or other material transactions;
- government regulation of the mining industry and the nuclear power industry in the United States and the Republic of Turkey;
- operating conditions at our mining projects;
- the world-wide supply and demand of uranium and lithium;
- weather conditions;
- unanticipated geological, processing, regulatory and legal or other problems we may encounter:
- currently pending or new litigation;
- our ability to maintain and timely receive mining and other permits from regulatory agencies;
 and
- the risks set forth under the caption "Risk Factors" herein and in our most recent Annual Report on Form 10-K and our other filings with the SEC.

In light of these risks, uncertainties and assumptions, you are cautioned not to place undue reliance on forward-looking statements, which are inherently unreliable and speak only as of the date of this prospectus, any accompanying prospectus supplement or free writing prospectus, or any document incorporated by reference in this prospectus. When considering forward-looking statements, you should keep in mind the cautionary statements in this prospectus, any accompanying prospectus supplement or free writing prospectus, and the documents incorporated by reference in this prospectus. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. In light of these risks, uncertainties and assumptions, the forward-looking events discussed in or incorporated by reference in this prospectus or any accompanying prospectus supplement or free writing prospectus might not occur.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information about Westwater Resources, Inc. This summary does not contain all of the information that may be important to you in making an investment decision. For a more complete understanding of Westwater Resources, Inc. you should read carefully this entire prospectus supplement and the accompanying prospectus, including the "Risk Factors" section and the other documents we refer to and incorporate by reference. Unless otherwise indicated, "common stock" means our common stock, par value \$0.001 per share. Unless otherwise noted, all share and per share information has been adjusted to reflect the one-for-twelve reverse stock split of our common stock that became effective after the close of trading on March 7, 2016.

Westwater Resources Overview

Westwater Resources, Inc. is an energy metals exploration and development company. We are focused on expanding our energy metals strategy, which includes developing our lithium business while maintaining optionality on the future rising uranium price with our significant uranium property holdings in the Republic of Turkey, Texas and New Mexico. Incorporated in 1977, WWR also owns an extensive information database of historic drill-hole logs, assay certificates, maps and technical reports for uranium properties located in the western United States.

We established our lithium business in 2016 and currently control mineral rights encompassing approximately 36,730 acres across three prospective lithium brine basins in Nevada and Utah. We are conducting exploration and geological evaluation of these properties in 2017 and 2018 for potential development of any lithium resources that may be discovered there.

The focus of our uranium business continues to be on advancing the Temrezli in-situ recovery ("ISR") uranium project in central Turkey when uranium prices permit economic development of this project. We control extensive exploration properties in Turkey under eight exploration and operating licenses covering approximately 39,000 acres. In Texas, we have two licensed and currently idled uranium processing facilities and approximately 11,000 acres of prospective ISR uranium projects. In New Mexico, the Company controls mineral rights encompassing approximately 186,000 acres in the prolific Grants Mineral Belt, which is one of the largest concentrations of sandstone-hosted uranium deposits in the world.

Effective August 21, 2017, we amended our certificate of incorporation to change our name from Uranium Resources, Inc. to Westwater Resources, Inc. Our principal executive offices are located at 6950 South Potomac Street, Suite 300, Centennial, Colorado 80112, and our telephone number is (303) 531-0418. Our website is located at *www.westwaterresources.net*. Information contained on our website or that can be accessed through our website is not incorporated by reference into this prospectus.

For additional information as to our business, properties and financial condition, please refer to the documents cited in "Where You Can Find More Information."

The Offering

The following summary is provided solely for your convenience and is not intended to be complete. You should read the full text and more specific details contained elsewhere in this prospectus supplement and the accompanying prospectus. For a more detailed description of our common stock, see "Description of Securities—Common Stock" in the accompanying prospectus.

Issuer	Westwater Resources, Inc.
Shares of common stock offered	Up to \$22,000,000 of shares of our common stock, par value \$0.001 per share
Common stock to be outstanding after this offering(1)	Up to 41.7 million shares assuming sale of 16.5 million shares at a price of \$1.41 per share, which was the closing price of our common stock on the Nasdaq Capital Market on September 22, 2017. The actual number of shares issued will vary depending on the sales prices under this offering.
Manner of offering	Issuance of 880,000 Commitment Shares to Aspire Capital in consideration for entering into the Purchase Agreement, and additional Purchase Shares to Aspire Capital from time to time, subject to certain minimum stock price requirements and daily caps for an aggregate offering price of up to \$22,000,000. See "The Aspire Transaction" and "Plan of Distribution."
Use of Proceeds	We intend to use the net proceeds from this offering for general corporate purposes, which may include technical studies, restoration commitments, capital expenditures, debt reduction and working capital. See "Use of Proceeds" on page S-5.
Listing	Our common stock is listed on the Nasdaq Capital Market under the symbol "WWR," and the Australian Stock Exchange (ASX) under the symbol "WWR."
Risk Factors	An investment in our common stock involves risks, and prospective investors should carefully consider the matters discussed under "Risk Factors" beginning on page S-3 of this prospectus supplement and the reports we file with the SEC pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), incorporated by reference in this prospectus supplement and the accompanying prospectus before making an investment in our common stock.

⁽¹⁾ The number of shares of common stock to be outstanding after this offering includes 25,168,339 shares of common stock outstanding as of September 22, 2017 and excludes, as of September 22, 2017, 273,375 shares issuable upon the vesting of outstanding restricted stock units, 293,992 shares issuable upon the exercise of outstanding stock options, and 183,333 shares underlying warrants issued in connection with our March 2015 registered direct offering.

Except as otherwise indicated, the information contained in this prospectus supplement assumes the sale of all of the shares offered hereby and assumes the sale of 15.6 million Purchase Shares at a price of \$1.41 per share, which was the closing price of our common stock on the Nasdaq Capital Market on September 22, 2017.

RISK FACTORS

An investment in our common stock involves a high degree of risk. Before making an investment decision, you should carefully consider the risks described below, as well as the risks described under the caption "Risk Factors" in our most recent Annual Report on Form 10-K and in the other filings we make with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, which we have incorporated herein by reference. Our business, financial condition, results of operations and cash flows could be materially adversely affected by any of these risks, and the market or trading price of our common stock could decline due to any of these risks. In addition, please read "Disclosure Regarding Forward-Looking Statements" in this prospectus supplement, where we describe additional uncertainties associated with our business and the forward-looking statements included or incorporated by reference in this prospectus supplement. Please note that additional risks not presently known to us or that we currently deem immaterial may also impair our business and operations.

Risks Related to this Offering

Sales of our common stock to Aspire Capital may cause substantial dilution to our existing stockholders and the sale of the shares of our common stock acquired by Aspire Capital could cause the price of our common stock to decline.

This prospectus supplement relates to \$22,000,000 of our common stock that we may issue and sell to Aspire Capital from time to time pursuant to the Purchase Agreement, together with the 880,000 Commitment Shares. It is anticipated that shares offered to Aspire Capital in this offering will be sold over a period of up to 30 months from the date of this prospectus supplement. The number of shares ultimately offered for sale to Aspire Capital under this prospectus supplement is dependent upon the number of shares we elect to sell to Aspire Capital under the Purchase Agreement. Depending upon market liquidity at the time, sales of shares of our common stock under the Purchase Agreement may cause the trading price of our common stock to decline.

Aspire Capital may ultimately purchase all, some or none of the \$20,000,000 of shares of common stock remaining after the 1,428,571 shares sold in the Initial Purchase (as defined herein) that, together with the 880,000 Commitment Shares, is the subject of this prospectus supplement. After Aspire Capital has acquired shares under the Purchase Agreement, it may sell all, some or none of those shares. Sales to Aspire Capital by us pursuant to the Purchase Agreement under this prospectus supplement may result in substantial dilution to the interests of other holders of our common stock. The sale of a substantial number of shares of our common stock to Aspire Capital in this offering, or anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales. However, we have the right to control the timing and amount of any sales of our shares to Aspire Capital and the Purchase Agreement may be terminated by us at any time at our discretion without any cost to us.

We have a right to sell up to a maximum of 100,000 Purchase Shares per day under our Purchase Agreement with Aspire Capital, which total may be increased by mutual agreement up to an additional 2,000,000 Purchase Shares per day. The extent to which we rely on Aspire Capital as a source of funding will depend on a number of factors, including the prevailing market price of our common stock and the extent to which we are able to secure working capital from other sources. The aggregate number of shares that we can sell to Aspire Capital under the Purchase Agreement may in no case exceed 5,033,667 shares of our common stock (which is equal to approximately 19.99% of the common stock outstanding on the date of the Purchase Agreement), including the 880,000 Commitment Shares and the 1,428,571 Initial Purchase Shares (the "Exchange Cap"), unless (i) stockholder approval is obtained to issue more, in which case the Exchange Cap will not apply, or (ii) stockholder approval has not been obtained and at any time the Exchange Cap is reached and at all times thereafter the average price paid for all shares issued under the Purchase Agreement (including the 880,000 Commitment Shares) is equal to or greater than \$1.38, a price equal to the consolidated closing bid price for our common stock before the execution of the Purchase Agreement.

We have broad discretion in how we use the proceeds from this offering and we may use the proceeds in ways with which you disagree.

We have not allocated specific amounts of the net proceeds from this offering for any specific purpose. Accordingly, our management will have some flexibility in applying the net proceeds of this offering. You will be relying on the judgment of our management with regard to the use of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used in a manner in which you may desire. It is possible that the net proceeds will be invested in a way that does not yield a favorable, or any, return for us. The failure of our management to use such funds effectively could have a material adverse effect on our business, financial condition, operating results and cash flow.

Future sales of a significant number of our shares of common stock in the public markets, or the perception that such sales could occur, could depress the market price of our shares of common stock.

We are not restricted from issuing additional securities in the future, including our common stock, securities that are convertible into or exchangeable for, or that represent the right to receive, our common stock or substantially similar securities. To the extent that we raise additional funds through the sale of equity or convertible debt securities, the issuance of such securities will result in dilution to our stockholders. Sales of a substantial number of our shares of common stock in the public markets, or the perception that such sales could occur, could depress the market price of our shares of common stock and impair our ability to raise capital through the sale of additional equity securities. A substantial number of shares of common stock are being offered by this prospectus supplement, and we cannot predict if and when Aspire Capital may sell such shares in the public markets. In addition, we cannot predict the number of these shares that might be sold nor the effect that future sales of our shares of common stock would have on the market price of our shares of common stock

Terms of subsequent financings may adversely impact our stockholders.

In order to finance our future production plans and working capital needs, we will have to raise funds through the issuance of equity or debt securities. Depending on the type and the terms of any financing we pursue, stockholders' rights and the value of their investment in our common stock could be reduced. A financing could involve one or more types of securities including common stock, convertible debt or warrants to acquire common stock. These securities could be issued at or below the then prevailing market price for our common stock. We currently have no authorized preferred stock. In addition, if we issue secured debt securities, the holders of the debt would have a claim to our assets that would be prior to the rights of stockholders until the debt is paid. Interest on these debt securities would increase costs and negatively impact operating results. If the issuance of new securities results in diminished rights to holders of our common stock, the market price of our common stock could be negatively impacted.

WWR has no history of paying dividends on its common stock, and we do not anticipate paying dividends in the foreseeable future.

WWR has not previously paid dividends on its common stock. We currently anticipate that we will retain all of our available cash, if any, for use as working capital and for other general corporate purposes. Any payment of future dividends will be at the discretion of our Board of Directors and will depend upon, among other things, our earnings, financial condition, capital requirements, level of indebtedness, statutory and contractual restrictions applicable to the payment of dividends and other considerations that our Board of Directors deems relevant. Investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize a return on their investment.

USE OF PROCEEDS

We intend to use the net proceeds from this offering for general corporate purposes, which may include technical studies, exploration activities, restoration commitments, capital expenditures, debt reduction and working capital. The amounts and timing of expenditures will depend on a number of factors, such as the timing, scope, progress and results of our exploration activities. As of the date of this prospectus supplement, we cannot specify with certainty the particular uses of the proceeds from this offering. Accordingly, our management will retain broad discretion over the use of proceeds, and we may ultimately use the proceeds for different purposes than what we currently intend. Until we use the proceeds for any purpose, we expect to invest them in short-term investments.

PRICE RANGE OF COMMON STOCK AND DIVIDEND POLICY

Our common stock is traded on the Nasdaq Capital Market under the symbol "WWR" and the ASX under the symbol "WWR." The last reported sale price of our common stock on September 22, 2017 on the Nasdaq Capital Market was \$1.41 per share. The following table sets forth the high and low sale prices for our common stock for the periods indicated as reported on the Nasdaq Capital Market.

	High	Low
Year Ended December 31, 2015:		
First Quarter	\$23.76	\$15.60
Second Quarter	\$19.20	\$11.04
Third Quarter	\$16.08	\$8.16
Fourth Quarter	\$10.20	\$4.20
Year Ended December 31, 2016:		
First Quarter	\$7.80	\$2.10
Second Quarter	\$3.75	\$1.39
Third Quarter	\$2.13	\$1.25
Fourth Quarter	\$1.75	\$0.97
Year Ended December 31, 2017:		
First Quarter	\$4.00	\$1.35
Second Quarter	\$2.18	\$1.30
Third Quarter (through September 22, 2017)	\$1.70	\$1.25

Following the close of trading on March 7, 2016, we effected a one-for-twelve reverse stock split of our issued and outstanding common stock. The common stock commenced trading on the Nasdaq Capital Market on a split-adjusted basis upon the open of trading on March 8, 2016. The high and low sale prices for our common stock presented in the foregoing table give effect to the reverse stock split.

Before August 21, 2017, our common stock traded on the Nasdaq Capital Market under the symbol "URRE."

We have never declared or paid any cash dividend on our common stock, nor do we currently intend to pay any cash dividend on our common stock in the foreseeable future. We expect to retain our earnings, if any, for the growth and development of our business.

THE ASPIRE TRANSACTION

General

On September 25, 2017, we entered into a Purchase Agreement with Aspire Capital, which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of \$22,000,000 of shares of our common stock (the "Purchase Shares") from time to time over the term of the Purchase Agreement plus, as consideration for entering into the Purchase Agreement, we agreed to issue 880,000 shares of our common stock to Aspire Capital (the "Commitment Shares"). In addition, on September 27, 2017, Aspire Capital made an initial purchase (the "Initial Purchase") of 1,428,571 Purchase Shares (the "Initial Purchase Shares") at a purchase price of \$1.40 per share, pursuant to the Purchase Agreement.

We are filing this prospectus supplement with regard to the offering of our common stock consisting of (i) the Commitment Shares, and (ii) additional shares of our common stock having an aggregate offering price of up to \$22,000,000 that we may sell to Aspire Capital pursuant to the Purchase Agreement.

Purchase of Shares under the Purchase Agreement

On September 27, 2017, the conditions to the commencement under the Purchase Agreement were satisfied. On any business day over the 30-month term of the Purchase Agreement (until March 25, 2020), we have the right, in our sole discretion, to present Aspire Capital with a purchase notice (each, a "Purchase Notice") directing Aspire Capital to purchase up to 100,000 Purchase Shares per business day; however, no sale pursuant to such a Purchase Notice may exceed three hundred thousand dollars (\$300,000) per business day, unless we and Aspire Capital mutually agree, and Aspire Capital will not be required to buy Purchase Shares pursuant to a Purchase Notice that was received by Aspire Capital on any business day on which the last closing trade price of our common stock on the Nasdaq Capital Market (or alternative national exchange in accordance with the Purchase Agreement) is below \$0.25 (the "Floor Price"). We and Aspire Capital also may mutually agree to increase the number of shares that may be sold to as much as an additional 2,000,000 Purchase Shares per business day. The purchase price per Purchase Share pursuant to such Purchase Notice (the "Purchase Price") is the lower of:

- (i) the lowest sale price for our common stock on the date of sale; or
- (ii) the average of the three lowest closing sale prices for our common stock during the 12 consecutive business days ending on the business day immediately preceding the purchase date.

The applicable Purchase Price will be determined prior to delivery of any Purchase Notice.

In addition, on any date on which we submit a Purchase Notice to Aspire Capital for at least 100,000 Purchase Shares, we also have the right, in our sole discretion, to present Aspire Capital with a volume-weighted average price purchase notice (each, a "VWAP Purchase Notice") directing Aspire Capital to purchase an amount of our common stock equal to up to 30% of the aggregate shares of common stock traded on the next business day (the "VWAP Purchase Date"), subject to a maximum number of shares determined by us (the "VWAP Purchase Share Volume Maximum"). The purchase price per Purchase Share pursuant to such VWAP Purchase Notice (the "VWAP Purchase Price") shall be the lesser of the closing sale on the VWAP Purchase Date or 95% of the volume weighted average price for our common stock traded on (i) the VWAP Purchase Date if the aggregate shares to be purchased on that date does not exceed the VWAP Purchase Share Volume Maximum, or (ii) the portion of such business day until such time as the aggregate shares to be purchased will equal the VWAP Purchase Share Volume Maximum.

Further, if on the VWAP Purchase Date the sale price of our common stock falls below the greater of (i) 80% of the closing price of our common stock on the business day immediately preceding the VWAP

Purchase Date or (ii) the price set by us in the VWAP Purchase Notice (the "VWAP Minimum Price Threshold"), the VWAP Purchase Amount will be determined using the percentage in the VWAP Purchase Notice of the total shares traded for such portion of the VWAP Purchase Date prior to the time that the sale price of our common stock fell below the VWAP Minimum Price Threshold and the VWAP Purchase Price will be 95% of the volume weighted average price of our common stock sold during such portion of the VWAP Purchase Date prior to the time that the sale price of our common stock fell below the VWAP Minimum Price Threshold.

The number of Purchase Shares covered by and timing of each Purchase Notice or VWAP Purchase Notice are determined by the Company, at our sole discretion. The aggregate number of shares that we can sell to Aspire Capital under the Purchase Agreement may in no case exceed 5,033,667 shares of our common stock (which is equal to approximately 19.99% of the common stock outstanding on the date of the Purchase Agreement), including the 880,000 Commitment Shares and the 1,428,571 Initial Purchase Shares (the "Exchange Cap"), unless (i) stockholder approval is obtained to issue more, in which case the Exchange Cap will not apply, or (ii) stockholder approval has not been obtained and at any time the Exchange Cap is reached and at all times thereafter the average price paid for all shares issued under the Purchase Agreement (including the 880,000 Commitment Shares) is equal to or greater than \$1.38, a price equal to the consolidated closing bid price for our common stock before the execution of the Purchase Agreement; provided that at no time shall Aspire Capital (together with its affiliates) beneficially own more than 19.99% of our common stock. Except for the Initial Purchase, Aspire Capital has no right to require any sales by us, but is obligated to make purchases from us as we direct in accordance with the Purchase Agreement. There are no limitations on use of proceeds, financial or business covenants, restrictions on future fundings, rights of first refusal, participation rights, penalties or liquidated damages in the Purchase Agreement. We did not pay any additional amounts to reimburse or otherwise compensate Aspire Capital in connection with the transaction. The Purchase Agreement may be terminated by us at any time, at our discretion, without any penalty or cost to us.

Events of Default

Aspire Capital may terminate the Purchase Agreement upon the occurrence of any of the following events of default:

- the effectiveness of any registration statement that is required to be maintained effective pursuant to the terms of the registration rights agreement between us and Aspire Capital lapses for any reason (including, without limitation, the issuance of a stop order) or is unavailable for sale of our shares of common stock in accordance with the terms of the registration rights agreement, and such lapse or unavailability continues for a period of ten consecutive business days or for more than an aggregate of thirty business days in any 365-day period;
- the suspension from trading or failure of our common stock to be listed on our principal market for a period of three consecutive business days;
- the delisting of our common stock from our principal market, and our common stock is not immediately thereafter trading on the New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market, the OTC Bulletin Board or the OTCQB marketplace or OTCQX marketplace of the OTC Markets Group;
- our transfer agent's failure to issue to Aspire Capital shares of our common stock which Aspire
 Capital is entitled to receive under the Purchase Agreement within five business days after an
 applicable purchase date;
- any breach by us of the representations or warranties or covenants contained in the Purchase Agreement or any related agreements which could have a material adverse effect on us subject to a cure period of five business days;

- any person commences a proceeding against us pursuant to or within the meaning of any bankruptcy law;
- if we, pursuant to any bankruptcy law, (i) commence a voluntary case, (ii) consent to the entry of an order for relief against us in an involuntary case, (iii) consent to the appointment of a custodian for us or for all or substantially all of our property, (iv) make a general assignment for the benefit of our creditors or (v) we become insolvent;
- if a court of competent jurisdiction enters an order or decree under any bankruptcy law that (i) is for relief against us in an involuntary case, (ii) appoints a custodian for all or substantially all of our property or (iii) orders the liquidation of us or any of our subsidiaries; or
- if the aggregate number of shares of common stock issued to Aspire Capital under the Purchase Agreement exceeds the Exchange Cap, unless and until stockholder approval is obtained or we can otherwise continue to issue shares under the Purchase Agreement without breaching the Company's obligations under the rules or regulations of the Nasdaq Capital Market.

Our Termination Rights

We may terminate the Purchase Agreement with notice at any time, in our discretion, without any cost or penalty.

No Short-Selling or Hedging by Aspire Capital

Aspire Capital has agreed that neither it nor any of its agents, representatives and affiliates shall engage in any direct or indirect short-selling or hedging of our common stock during any time prior to the termination of the Purchase Agreement.

Effect of Performance of the Purchase Agreement on Our Stockholders

The Purchase Agreement does not limit the ability of Aspire Capital to sell any or all of the shares it currently owns or receives in this offering. It is anticipated that shares sold to Aspire Capital in this offering will be sold to Aspire Capital over a period of up to 36 months from the date of this prospectus supplement, or until March 25, 2020. The subsequent resale by Aspire Capital of a significant amount of shares sold to Aspire Capital in this offering at any given time could cause the market price of our common stock to decline or to be highly volatile. Aspire Capital may ultimately purchase all, some or none of the \$20,000,000 of shares of common stock remaining after the 1,428,571 Initial Purchase Shares that, together with the 880,000 Commitment Shares and the Initial Purchase Shares, is the subject of this prospectus supplement. Aspire Capital may resell all, some or none of the Commitment Shares and any Purchase Shares it acquires. Therefore, sales to Aspire Capital by us pursuant to the Purchase Agreement and this prospectus supplement also may result in substantial dilution to the interests of other holders of our common stock. However, we have the right to control the timing and amount of any sales of our shares to Aspire Capital and the Purchase Agreement may be terminated by us at any time at our discretion without any cost to us.

Amount of Potential Proceeds to be Received under the Purchase Agreement

Under the Purchase Agreement, we may sell Purchase Shares having an aggregate offering price of up to \$22,000,000 to Aspire Capital from time to time, including the Initial Purchase. The number of shares ultimately offered for sale to Aspire Capital in this offering in addition to the shares sold in the Initial Purchase is dependent upon the number of shares we elect to sell to Aspire Capital under the Purchase Agreement. In addition, Aspire Capital will not be required to buy Purchase Shares pursuant to a Purchase Notice that was received by Aspire Capital on any business day on which the last closing trade price of our common stock on the Nasdaq Capital Market (or alternative national exchange in accordance with the Purchase Agreement) is

below the Floor Price. The following table sets forth the amount of proceeds we would receive from Aspire Capital from the sale of shares at varying purchase prices:

		Percentage of	Proceeds from the	
		Outstanding Shares	Sale of Shares to	
	Number of Shares	After Giving Effect to	Aspire Capital	
	to be Sold if Full	the Sale to Aspire	Under the Purchase	
Assumed Average Purchase Price	Purchase (1)	Capital (2)	Agreement (1)	
\$0.25	81,428,571	76%	\$22,000,000	
\$1.00	21,428,571	45%	\$22,000,000	
\$1.41	15,612,968	37%	\$22,000,000	
\$3.00	8,095,238	24%	\$22,000,000	
\$5.00	5,428,571	17%	\$22,000,000	

⁽¹⁾ Includes the total number of Purchase Shares (but not Commitment Shares) which we would have sold under the Purchase Agreement at the corresponding assumed purchase price set forth in the adjacent column, up to an aggregate purchase price of \$20,000,000, plus the 1,428,571 Initial Purchase Shares sold at a purchase price of \$1.40 per share.

(3) On September 22, 2017, the last reported sales price of our common stock on the Nasdaq Capital Market was \$1.41 per share.

Information With Respect to Aspire Capital

Aspire Capital Partners LLC ("Aspire Partners") is the Managing Member of Aspire Capital Fund LLC ("Aspire Fund"). SGM Holdings Corp ("SGM") is the Managing Member of Aspire Partners. Mr. Steven G. Martin ("Mr. Martin") is the president and sole shareholder of SGM, as well as a principal of Aspire Partners. Mr. Erik J. Brown ("Mr. Brown") is the president and sole shareholder of Red Cedar Capital Corp ("Red Cedar"), which is a principal of Aspire Partners. Mr. Christos Komissopoulos ("Mr. Komissopoulos") is president and sole shareholder of Chrisko Investors Inc ("Chrisko"), which is a principal of Aspire Partners. Each of Aspire Partners, SGM, Red Cedar, Chrisko, Mr. Martin, Mr. Brown, and Mr. Komissopoulos may be deemed to be a beneficial owner of common stock held by Aspire Fund. Each of Aspire Partners, SGM, Red Cedar, Chrisko, Mr. Martin, Mr. Brown, and Mr. Komissopoulos disclaims beneficial ownership of the common stock held by Aspire Fund.

PLAN OF DISTRIBUTION

We entered into the Purchase Agreement with Aspire Capital on September 25, 2017. In consideration for entering into the Purchase Agreement, we will issue 880,000 shares of common stock to Aspire Capital. The Purchase Agreement provides that, upon the terms and subject to the conditions set forth therein, Aspire Capital is irrevocably committed to purchase up to \$22 million of shares of our common stock over the approximately 30-month term of the Purchase Agreement. In addition, on September 25, 2017, Aspire Capital made the Initial Purchase of the 1,428,571 Initial Purchase Shares at a purchase price of \$1.40 per share, pursuant to the Purchase Agreement.

On September 27, 2017, the conditions to the commencement under the Purchase Agreement were satisfied. On any business day over the 30-month term of the Purchase Agreement (until March 25, 2020), we have the right, in our sole discretion, to present Aspire Capital with a Purchase Notice directing Aspire Capital

⁽²⁾ Based on 25,168,339 shares of our common stock outstanding on September 22, 2017. This number does not take into account, as of September 22, 2017, 273,375 shares issuable upon the vesting of outstanding restricted stock units, 293,992 shares issuable upon the exercise of outstanding stock options, and 183,333 shares underlying warrants issued in connection with our March 2015 registered direct offering.

to purchase up to 100,000 Purchase Shares per business day; however, no sale pursuant to such a Purchase Notice may exceed three hundred thousand dollars (\$300,000) per business day, unless we and Aspire Capital mutually agree, and Aspire Capital will not be required to buy Purchase Shares pursuant to a Purchase Notice that was received by Aspire Capital on any business day on which the last closing trade price of our common stock on the Nasdaq Capital Market (or alternative national exchange in accordance with the Purchase Agreement) is below the Floor Price. We and Aspire Capital also may mutually agree to increase the number of shares that may be sold to as much as an additional 2,000,000 Purchase Shares per business day. The Purchase Price per Purchase Share pursuant to such Purchase Notice is the lower of:

- (i) the lowest sale price for our common stock on the date of sale; or
- (ii) the average of the three lowest closing sale prices for our common stock during the 12 consecutive business days ending on the business day immediately preceding the purchase date.

The applicable Purchase Price will be determined prior to delivery of any Purchase Notice.

In addition, on any date on which we submit a Purchase Notice to Aspire Capital for at least 100,000 Purchase Shares, we also have the right, in our sole discretion, to present Aspire Capital with a VWAP Purchase Notice directing Aspire Capital to purchase an amount of our common stock equal to up to 30% of the aggregate shares of common stock traded on the VWAP Purchase Date, subject to the VWAP Purchase Share Volume Maximum. The VWAP Purchase Price shall be the lesser of the closing sale on the VWAP Purchase Date or 95% of the volume weighted average price for our common stock traded on (i) the VWAP Purchase Date if the aggregate shares to be purchased on that date does not exceed the VWAP Purchase Share Volume Maximum, or (ii) the portion of such business day until such time as the aggregate shares to be purchased will equal the VWAP Purchase Share Volume Maximum.

Further, if on the VWAP Purchase Date the sale price of our common stock falls below the VWAP Minimum Price Threshold, the VWAP Purchase Amount will be determined using the percentage in the VWAP Purchase Notice of the total shares traded for such portion of the VWAP Purchase Date prior to the time that the sale price of our common stock fell below the VWAP Minimum Price Threshold and the VWAP Purchase Price will be 95% of the volume weighted average price of our common stock sold during such portion of the VWAP Purchase Date prior to the time that the sale price of our common stock fell below the VWAP Minimum Price Threshold.

The number of Purchase Shares covered by and timing of each Purchase Notice or VWAP Purchase Notice are determined by the Company, at our sole discretion. The aggregate number of shares that we can sell to Aspire Capital under the Purchase Agreement may in no case exceed the Exchange Cap, unless (i) stockholder approval is obtained to issue more, in which case the Exchange Cap will not apply, or (ii) stockholder approval has not been obtained and at any time the Exchange Cap is reached and at all times thereafter the average price paid for all shares issued under the Purchase Agreement (including the 880,000 Commitment Shares) is equal to or greater than \$1.38, a price equal to the consolidated closing bid price for our common stock before the execution of the Purchase Agreement; provided that at no time shall Aspire Capital (together with its affiliates) beneficially own more than 19.99% of our common stock. Except for the Initial Purchase, Aspire Capital has no right to require any sales by us, but is obligated to make purchases from us as we direct in accordance with the Purchase Agreement. There are no limitations on use of proceeds, financial or business covenants, restrictions on future fundings, rights of first refusal, participation rights, penalties or liquidated damages in the Purchase Agreement. We did not pay any additional amounts to reimburse or otherwise compensate Aspire Capital in connection with the transaction. The Purchase Agreement may be terminated by us at any time, at our discretion, without any penalty or cost to us

Aspire Capital is an "underwriter" within the meaning of the Securities Act.

Neither we nor Aspire Capital can presently estimate the amount of compensation that any agent will receive. We know of no existing arrangements between Aspire Capital, any other shareholder, broker, dealer, underwriter, or agent relating to the sale or distribution of the shares offered by this prospectus supplement. At the time a particular offer of shares is made, a prospectus supplement, if required, will be distributed that will set forth the names of any agents, underwriters, or dealers and any other required information.

We will pay all of the expenses incident to the registration, offering, and sale of the shares to Aspire Capital. We have agreed to indemnify Aspire Capital and certain other persons against certain liabilities in connection with the offering of shares of common stock offered hereby, including liabilities arising under the Securities Act or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. Aspire Capital has agreed to indemnify us against liabilities under the Securities Act that may arise from certain written information furnished to us by Aspire Capital specifically for use in this prospectus or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities.

Aspire Capital and its affiliates have agreed not to engage in any direct or indirect short selling or hedging of our common stock during the term of the Purchase Agreement.

We have advised Aspire Capital that it is required to comply with Regulation M promulgated under the Securities Exchange Act of 1934, as amended. With certain exceptions, Regulation M precludes the selling shareholder, any affiliated purchasers, and any broker-dealer or other person who participates in the distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase any security which is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of the shares offered hereby this prospectus.

We may suspend the sale of shares to Aspire Capital pursuant to this prospectus for certain periods of time for certain reasons, including if the prospectus is required to be supplemented or amended to include additional material information.

This offering will terminate on the date that all shares offered by this prospectus have been sold to Aspire Capital.

LEGAL MATTERS

The validity of the common stock offered hereby will be passed upon for us by Hogan Lovells US LLP, Denver, Colorado.

EXPERTS

The consolidated financial statements of Westwater Resources, Inc. for the fiscal years ended December 31, 2016 and December 31, 2015 incorporated by reference herein have been audited by Hein & Associates LLP, independent registered public accounting firm, as set forth in their report, incorporated by reference herein, and are incorporated by reference in reliance upon that report given on the authority of Hein & Associates LLP as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any reports, statements or other information that we file at the SEC's public reference room at 100 F Street, N.E., Washington, District of Columbia 20549. Please call the SEC at 1-800-SEC-0330 for more information on the public reference room. Our SEC filings are also available to the public from commercial retrieval services and at the website maintained by the SEC at www.sec.gov. The reports and other

information filed by us with the SEC are also available at our website. The address of our website is www.westwaterresources.net. Information contained on our website or that can be accessed through our website is not incorporated by reference into this prospectus supplement or the accompanying prospectus.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate information into this prospectus supplement "by reference," which means that we can disclose important information to you by referring you to another document that we file separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus supplement, except for any information superseded by information contained directly in this prospectus supplement. These documents contain important information about WWR and its financial condition, business and results.

We are incorporating by reference the filings listed below and any additional documents that we may file with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date we file this prospectus supplement and prior to the termination of the offering, except we are not incorporating by reference any information furnished (but not filed) under Item 2.02 or Item 7.01 of any Current Report on Form 8-K and corresponding information furnished under Item 9.01 as an exhibit thereto:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, filed with the SEC on March 2, 2017;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2017 and June 30, 2017, filed with the SEC on May 11, 2017 and August 11, 2017, respectively;
- our Current Reports on Form 8-K filed with the SEC on January 10, 2017, January 13, 2017, January 19, 2017, January 26, 2017, February 9, 2017, February 10, 2017, February 16, 2017, April 17, 2017, July 19, 2017 and August 21, 2017 (except that any portions thereof which are furnished and not filed shall not be deemed incorporated); and
- the description of our common stock contained in our Form 8-A filed on April 11, 2007, including any amendments or reports filed for the purpose of updating the description.

We will provide, without charge, to each person to whom a copy of this prospectus supplement has been delivered, including any beneficial owner, a copy of any and all of the documents referred to herein that are summarized in this prospectus supplement, if such person makes a written or oral request directed to:

Westwater Resources, Inc. 6950 South Potomac Street, Suite 300 Centennial, Colorado 80112 Attn: Corporate Secretary (303) 531-0481

Westwater Resources, Inc.



\$22,000,000 of Common Stock plus 880,000 Commitment Shares

PROSPECTUS SUPPLEMENT

September 27, 2017

PROSPECTUS



\$60,000,000 Common Stock Debt Securities Warrants Units

We may offer and sell from time to time up to \$60,000,000 of any combination of the securities described in this prospectus, in one or more classes or series and in amounts, at prices and on terms that we will determine at the times of the offerings. We may also offer common stock upon conversion of debt securities or upon the exercise of warrants.

We may sell the securities directly to you, through agents we select, or through underwriters and dealers we select, on a continuous or delayed basis. If we use agents, underwriters or dealers to sell the securities, we will name them and describe their compensation in a prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

This prospectus describes some of the general terms that may apply to these securities and the general manner in which they may be offered. Each time we sell securities we will provide a prospectus supplement that will contain specific information about the terms of the securities we are offering and the specific manner in which we will offer the securities. The prospectus supplement may add to, update or change the information in this prospectus. You should read this prospectus and any prospectus supplement carefully before you invest in our securities. This prospectus may not be used to sell securities unless accompanied by a prospectus supplement.

Our common stock is listed on the Nasdaq Capital Market under the symbol "URRE." As of March 3, 2017, the aggregate market value of our outstanding common stock held by non-affiliates, or public float, was approximately \$78.0 million, based on 24,493,374 shares of outstanding common stock, of which 36,119 shares were held by affiliates, and a price of \$3.19 per share, which was the last reported sale price of our common stock on the Nasdaq Capital Market on January 11, 2017.

Investing in our securities involves a high degree of risk. See "Risk Factors" beginning on page 1 of this prospectus for factors you should consider before buying our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is March 9, 2017

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We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus or any accompanying prospectus supplement or free writing prospectus, and we take no responsibility for any other information that others may give you. This prospectus is not an offer to sell, nor is it a solicitation of an offer to buy, the securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained in this prospectus or any prospectus supplement or free writing prospectus is accurate as of any date other than the date on the front cover of those documents, or that the information contained in any document incorporated by reference is accurate as of any date other than the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

As permitted by the rules and regulations of the Securities and Exchange Commission (the "SEC"), the registration statement of which this prospectus forms a part includes additional information not contained in this prospectus. You may read the registration statement and the other reports we file with the SEC at the SEC's website or at the SEC's offices described below under the heading "Where You Can Find More Information." Before investing in our securities, you should read this prospectus and any accompanying prospectus supplement or free writing prospectus, as well as the additional information described under "Where You Can Find More Information" and "Information Incorporated by Reference."

References to the "Company," "URI," "we," "our" and "us" in this prospectus are to Uranium Resources, Inc. and its consolidated subsidiaries, unless the context otherwise requires. This document includes trade names and trademarks of other companies. All such trade names and trademarks appearing in this document are the property of their respective holders.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the SEC utilizing a shelf registration process. Under the shelf registration process, we may offer, from time to time, the securities or combinations of the securities described in this prospectus with a total offering price of up to \$60,000,000 in one or more offerings at prices and on terms to be determined by market conditions at the time of each offering. Unless otherwise indicated, "common stock" means our common stock, par value \$0.001 per share. Unless otherwise noted, all share and per share information has been adjusted to reflect the one-for-twelve reverse stock split of our common stock that became effective after the close of trading on March 7, 2016.

This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities, we will provide a prospectus supplement or free writing prospectus that will contain specific information about the terms of the offering.

A prospectus supplement or free writing prospectus may include a discussion of risks or other special considerations applicable to us or the offered securities. A prospectus supplement or free writing prospectus may also add, update or change information contained in this prospectus. If there is any inconsistency between the information in this prospectus and any related prospectus supplement or free writing prospectus, you must rely on the information in the prospectus supplement or free writing prospectus. Please carefully read both this prospectus and the related prospectus supplement or free writing prospectus in their entirety together with additional information described under the heading "Where You Can Find More Information" in this prospectus. This prospectus may not be used to offer or sell any securities unless accompanied by a prospectus supplement or free writing prospectus.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any reports, statements or other information that we file at the SEC's public reference room at 100 F Street, N.E., Washington, District of Columbia 20549. Please call the SEC at 1-800-SEC-0330 for more information on the public reference room. Our SEC filings are also available to the public from commercial retrieval services and at the website maintained by the SEC at www.sec.gov. The reports and other information filed by us with the SEC are also available at our website. The address of the Company's website is www.uraniumresources.com. Information contained on our website or that can be accessed through our website is not incorporated by reference into this prospectus.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate information into this prospectus "by reference," which means that we can disclose important information to you by referring you to another document that we file separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, except for any information superseded by information contained directly in this prospectus. These documents contain important information about the Company and its financial condition, business and results.

We are incorporating by reference the Company's filings listed below and any additional documents that we may file with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") on or after the date hereof and prior to the termination of any offering, except we are not incorporating by reference any information furnished (but not filed) under Item 2.02 or Item 7.01 of any Current Report on Form 8-K and corresponding information furnished under Item 9.01 as an exhibit thereto:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 (the "2016 Form 10-K"), filed with the SEC on March 3, 2017;
- our Current Reports on Form 8-K filed with the SEC on January 10, 2017, January 13, 2017, January 19, 2017, January 26, 2017, February 9, 2017, February 10, 2017 and February 16, 2017

(except that any portions thereof which are furnished and not filed shall not be deemed incorporated); and

• the description of our common stock contained in our Form 8-A filed on April 11, 2007, including any amendments or reports filed for the purpose of updating the description.

We will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus has been delivered a copy of any and all of the documents referred to herein that are summarized in this prospectus, if such person makes a written or oral request directed to:

Uranium Resources, Inc.
6950 South Potomac Street, Suite 300
Centennial, Colorado 80112
Attn: Jeffrey L. Vigil
(303) 531-0470

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any accompanying prospectus supplement or free writing prospectus, and the documents we have incorporated by reference contain forward-looking statements within the meaning of the federal securities laws. Forward-looking statements convey our current expectations or forecasts of future events. We intend such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

Forward-looking statements are generally identifiable by use of the words "estimate," "project," "believe," "intend," "plan," "anticipate," "expect" and similar expressions. These forward-looking statements include management's expectations regarding our adequacy of funding, liquidity, burn rate, exploration plans, reserves and mineralized uranium material, capital requirements, timing of receipt of mining permits and access rights, acquisition or partnering opportunities, sales or exchanges, production capacity of mining operations for properties in the Republic of Turkey, South Texas, New Mexico, Utah and Nevada and planned dates for commencement of production at such properties. Our ability to predict results or the actual effect of future plans or strategies is inherently uncertain. Actual results could differ materially from those in forward-looking statements because of, among other reasons, the factors described below and in the periodic reports that we file with the SEC from time to time, including Forms 10-K, 10-Q and 8-K and any amendments thereto. The forward-looking statements are not guarantees of future performance. They are based on numerous assumptions that we believe are reasonable, but they are open to a wide range of uncertainties and business risks.

Key factors that could cause actual results to be different than expected or anticipated include, but are not limited to:

- the availability of capital to URI;
- the spot price and long-term contract price of uranium and lithium;
- risks associated with our foreign operations;
- the ability of URI to enter into and successfully close acquisitions, dispositions or other material transactions;
- government regulation of the mining industry and the nuclear power industry in the United States and the Republic of Turkey;
- operating conditions at our mining projects:
- the world-wide supply and demand of uranium and lithium;
- weather conditions;

- unanticipated geological, processing, regulatory and legal or other problems we may encounter;
- currently pending or new litigation;
- our ability to maintain and timely receive mining and other permits from regulatory agencies; and
- the risks set forth herein under the caption "Risk Factors."

In light of these risks, uncertainties and assumptions, you are cautioned not to place undue reliance on forward-looking statements, which are inherently unreliable and speak only as of the date of this prospectus, any accompanying prospectus supplement or free writing prospectus, or any document incorporated by reference in this prospectus. When considering forward-looking statements, you should keep in mind the cautionary statements in this prospectus, any accompanying prospectus supplement or free writing prospectus, and the documents incorporated by reference in this prospectus. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. In light of these risks, uncertainties and assumptions, the forward-looking events discussed in or incorporated by reference in this prospectus or any accompanying prospectus supplement or free writing prospectus might not occur.

ABOUT URANIUM RESOURCES, INC.

Uranium Resources, Inc. is an energy metals exploration and development company. We presently hold exploration properties with lithium and uranium exploration potential, a uranium development property in the Republic of Turkey, as well as idled uranium production properties. We were organized in 1977 to acquire and develop uranium projects in South Texas using the ISR process. Near term uranium production potential is now centered on our Temrezli ISR project in Turkey. URI also controls extensive exploration properties in Turkey under eight exploration and operating licenses covering approximately 39,000 acres with numerous exploration targets in Turkey, including the potential satellite Şefaatli project, which is 30 miles southwest of the Temrezli project. We have historically produced uranium by ISR methods in the state of Texas where we currently have ISR projects and two licensed processing facilities. We also have approximately 186,000 acres of mineral holdings in the prolific Grants Mineral Belt of the state of New Mexico, and 11,000 acres in the South Texas uranium province. URI acquired these properties over the past 25 years along with an extensive information database of historic drill-hole logs and analysis. None of URI's properties are currently in production. As of March 3, 2017 we had 33 employees.

Over 2016, we have developed a lithium focus with dominant land positions in highly prospective basins in Nevada and Utah. Our focus is on developing low cost lithium brines.

Our principal executive offices are located at 6950 South Potomac Street, Suite 300, Centennial, Colorado 80112, and our telephone number is (303) 531-0470. Our website is located at www.uraniumresources.com. Information contained on our website or that can be accessed through our website is not incorporated by reference into this prospectus.

For additional information as to our business, properties and financial condition, please refer to the documents cited in "Where You Can Find More Information" and "Information Incorporated by Reference."

RISK FACTORS

An investment in our securities involves a high degree of risk. Before making an investment decision, you should carefully consider the risks described below, as well as the risks described under the caption "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2016 and the other filings we make with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, which we have incorporated herein by reference. Our business, financial condition, results of operations and cash flows could be materially adversely affected by any of these risks, and the market or trading price of our securities could decline due to any of these risks. In addition, please read "Disclosure Regarding Forward-Looking Statements" in this prospectus, where we describe additional uncertainties associated with our business and the forward-looking statements included or incorporated by reference in this prospectus. Please note that additional risks not presently known to us or that we currently deem immaterial may also impair our business and operations.

Risks Related to Our Business

URI is not producing any metals at this time. As a result, we currently have no sources of operating cash. If we cannot monetize certain existing assets, partner with another company that has cash resources, find other means of generating revenue other than producing uranium or lithium and/or access additional sources of private or public capital, we may not be able to remain in business.

As a result of low uranium prices, we ceased production of uranium in 2009. We are not planning to commence production at any of our South Texas properties until we are able to acquire additional reserves or mineralized material and uranium prices recover to levels that will ensure that production, once resumed, is sustainable in the 300,000 to 500,000 pound range per year. Our ability to begin plant construction and wellfield development in Turkey and New Mexico is subject to availability of financing and activation of our permits and licenses. All of our lithium activities are highly prospective and may never generate revenue. We do not have a committed source of financing for the development of our

Temrezli project. There can be no assurance that we will be able to obtain financing for this project or our other projects. Our inability to develop the Temrezli or our other properties would have a material adverse effect on our future operations.

Until we begin uranium or lithium production, we have no way to generate cash inflows unless we monetize certain of our assets or through financing activities. Our future uranium or lithium production, cash flow and income are dependent upon the results of exploration as well as our ability to bring on new, as yet unidentified wellfields and to acquire and develop additional reserves. We can provide no assurance that our properties will be placed into production or that we will be able to continue to find, develop, acquire and finance additional reserves. If we cannot monetize certain existing assets, partner with another company that has cash resources, find other means of generating revenue other than producing uranium or lithium and/or access additional sources of private or public capital, we may not be able to remain in business and holders of our securities may lose their entire investment.

Our ability to function as an operating mining company will be dependent on our ability to mine our properties at a profit sufficient to finance further mining activities and for the acquisition and development of additional properties. The volatility of uranium and lithium prices makes long-range planning uncertain and raising capital difficult.

Our ability to function as an operating mining company will be dependent on our ability to mine our properties at a profit sufficient to finance further mining activities and for the acquisition and development of additional properties. The volatility of uranium and lithium prices makes long-range planning uncertain and raising capital difficult.

Our ability to operate on a positive cash flow basis will be dependent on mining sufficient quantities of uranium or lithium at a profit sufficient to finance our operations and for the acquisition and development of additional mining properties. Any profit will necessarily be dependent upon, and affected by, the long and short term market prices of uranium and lithium, which are subject to significant fluctuation. Uranium prices have been and will continue to be affected by numerous factors beyond our control. These factors include the demand for nuclear power, political and economic conditions in uranium producing and consuming countries, uranium supply from secondary sources and uranium production levels and costs of production. A significant, sustained drop in uranium prices may make it impossible to operate URI's uranium business at a level that will permit us to cover our fixed costs or to remain in operation.

The Company has no known lithium mineral reserves and it may not find any lithium and, even if it finds lithium, it may not be in economic quantities.

The Company has no known lithium mineral reserves at its Columbus Basin Project, Sal Rica Project or any other property. Additionally, even if the Company finds lithium in sufficient quantities to warrant recovery, it ultimately may not be recoverable. Finally, even if any lithium is recoverable, the Company does not know whether recovery can be done at a profit. The Company's lithium activities are highly prospective and may not result in any benefit to the Company.

If we are unable to raise additional capital, our business may fail and holders of our securities may lose their entire investment.

We had approximately \$3.3 million in cash at December 31, 2016 and \$6.8 million at February 13, 2017. On average, URI expended approximately \$0.8 million of cash per month during 2016, which is expected to continue during 2017. There can be no assurance that URI will be able to obtain additional capital after it exhausts its current cash. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the issuance of such securities would likely result in substantial dilution to existing holders of our securities. If we borrow money, we will have to pay interest and may also have to agree to restrictions that limit our operating flexibility.

If additional capital is not available in sufficient amounts or on a timely basis, URI will experience liquidity problems, and URI could face the need to significantly curtail current operations, change our planned business strategies and pursue other remedial measures. Any curtailment of business operations would have a material negative effect on operating

results, the value of our outstanding stock is likely to fall, and our business may fail, causing holders of our securities to lose their entire investment.

Our foreign operations subject us to a number of significant regulatory and legal risks that may have a material adverse impact on our prospects, projects, financial condition and results of operations.

Our acquisition of Anatolia Energy significantly increased the importance of foreign operations to our future prospects and growth, and our foreign operations expose us to a number of risks. These risks include such things as:

- enforcement of unfamiliar or uncertain foreign real estate, mineral tenure, contract, water use, mine safety and environmental laws and policies;
- challenges to mining, processing and related permits and licenses, or to applications for permits and licenses, by
 or on behalf of regulatory authorities, indigenous populations, non-governmental organizations or other third
 parties;
- war, crime, terrorism, sabotage, civil unrest and uncertain political and economic environments;
- renegotiation, nullification or forced modification of existing contracts, licenses, permits, approvals, concessions or the like;
- corruption;
- challenges in overseeing employees and contractors, including the risk that our employees and independent contractors may engage in unauthorized or illegal activity;
- exchange and currency controls and fluctuations;
- limitations on foreign exchange and repatriation of earnings;
- restrictions on mineral production and price controls:
- seizure of mineral production and expropriation or nationalization of property;
- changes in legislation, including changes related to taxation, new or increased mining royalty interests, import and export regulations, foreign ownership, foreign trade and foreign investment;
- high rates of inflation; and
- labor practices and disputes.

In addition, we face the numerous risks as a new acquirer that our expectations may not be realized and that we may encounter unexpected problems. We continue to review Anatolia Energy's operations in Turkey, including compliance with local laws and applicable permitting requirements. In the event we determine material noncompliance, we could face fines or restrictions on our ability to develop our projects in Turkey, which could have a material adverse effect on our prospects, projects, financial condition and results of operations.

In addition, regulatory, permitting and business arrangements in foreign jurisdictions are subject to extensive laws and regulations intended to prevent improper payments, fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of business arrangements that are commonplace in such foreign jurisdictions, and violations of such laws and regulations could result in regulatory sanctions and serious harm to our reputation. We have adopted a code of business conduct and ethics, but it is not always possible to identify and deter misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a

failure to be in compliance with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves, those actions could have a significant impact on our business, including the imposition of significant civil, criminal and administrative penalties.

The benefits of integrating URI and Anatolia Energy may not be realized.

To be successful on a going forward basis, we will need to combine and integrate the operations of URI and Anatolia Energy into one company. Integration will require substantial management attention and could detract attention from the day-to-day business of the combined company. We could encounter difficulties in the integration process, such as the need to revisit assumptions about reserves, future production, revenues, capital expenditures and operating costs, including synergies, the loss of key employees or commercial relationships or the need to address unanticipated liabilities. If we cannot integrate URI's and Anatolia Energy's businesses successfully, we may fail to realize the expected benefits of the Anatolia Transaction.

The Anatolia Transaction is expected to result in an ownership change for URI under Section 382 of the Code, potentially limiting the use of URI's net operating loss carryforwards and certain other tax attributes in future years. In addition, URI's ability to use its net operating loss carryforwards may be further limited if taxable income does not reach sufficient levels.

As of December 31, 2016, URI had approximately \$235.1 million of net operating loss ("NOL") carryforwards available to reduce U.S. federal taxable income in future years. Under Section 382 of the Code, if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change NOL carryforwards and other pre-change tax attributes to offset its postchange income and taxes may be limited. In general, an "ownership change" occurs if there is a cumulative change in ownership by "5-percent shareholders" that exceeds 50 percentage points over a rolling three-year period.

The Anatolia Transaction is expected to result in an ownership change under Section 382 of the Code for URI, potentially limiting the use of URI's NOL carryforwards in future taxable years for U.S. federal income tax purposes. These limitations may affect the timing of when these NOL carryforwards can be used which, in turn, may impact the timing of when cash is used to pay the taxes of URI and have a negative impact on URI's financial position and results of operations. In addition, URI's ability to use its NOL carryforwards will be dependent on its ability to generate taxable income. Some portion of the NOL carryforwards could expire before URI generates sufficient taxable income.

Section 382 of the Internal Revenue Code could apply and limit our ability to utilize a portion of the U.S. net operating loss carryforwards. Following the issuance of the Company's Common Stock in 2001, the Neutron merger in 2012 and the Anatolia Transaction in 2015, the ability to utilize the net operating loss carryforwards will be severely limited on an annual and aggregate basis. A formal Section 382 study has not been completed, therefore the actual usage of US net operating loss carryforwards has not been determined. Similar limitations apply to the state net operating loss carryforwards related to the Neutron acquisition.

Certain of our mineral properties may be subject to defects in title and we are at risk of loss of ownership.

Many of our mining properties are unpatented mining claims to which we have only possessory title. The validity of unpatented mining claims is often uncertain and such validity is always subject to contest. Unpatented mining claims are generally considered subject to greater title risk than patented mining claims or other real property interests that are owned in fee simple. Because unpatented mining claims are self-initiated and self-maintained, they possess some unique vulnerabilities not associated with other types of property interests. It is impossible to ascertain the validity of unpatented mining claims from public real property records, and, therefore, it can be difficult or impossible to confirm that all of the requisite steps have been followed for location, perfection and maintenance of an unpatented mining claim. The present status of our unpatented mining claims located on public lands allows us the exclusive right to remove locatable minerals, such as uranium and lithium. We are also allowed to use the surface of the land solely for purposes related to mining and processing the

mineral-bearing ores. However, legal ownership of the public land remains with the federal government. We remain at risk that the mining claims may be lost either to the federal government or to rival private claimants due to failure to comply with statutory requirements. In addition, we may not have, or may not be able to obtain, all necessary surface rights to develop a property.

We may incur significant costs related to defending the title to our properties. A successful claim contesting our title to a property may cause us to compensate other persons or perhaps reduce our interest in the affected property or lose our rights to explore and develop that property. This could result in us not being compensated for our prior expenditures relating to the property.

Our business could be adversely affected if we are unable to successfully renegotiate certain of our leases.

We are currently seeking to renegotiate the leases relating to our Cebolleta and Juan Tafoya projects. Each of the Cebolleta and Juan Tafoya leases has an initial term of ten years beginning in 2007 and 2006, respectively, and can be extended on a year-to-year basis. The leases require certain annual payments and provide other terms that are the subject of our current negotiations. While we are seeking to amend the current leases or enter into new leases for our Cebolleta and Juan Tafoya projects on terms more favorable to the Company and more reflective of current uranium market conditions, there can be no assurance that we will be successful in such efforts, and the lessors could demand terms that are unacceptable to us or refuse to engage in negotiations. If we are unable to reach agreement with the lessors, we could decide to terminate the Cebolleta and Juan Tafoya leases and abandon the projects. If we were to abandon these projects, it is unlikely we could recoup any of our costs, and abandonment would result in a substantial impairment of our assets. Such an impairment charge could cause the price of our stock to decline.

Exploration and development of uranium and lithium properties are risky and subject to great uncertainties.

The exploration for and development of uranium and lithium deposits involve significant risks. It is impossible to ensure that the current and future exploration programs on our existing properties will establish reserves. Whether a ore body will be commercially viable depends on a number of factors, including, but not limited to: the particular attributes of the deposit, such as size, grade and proximity to infrastructure; uranium and lithium prices, which cannot be predicted and which have been highly volatile in the past; mining, processing and transportation costs; perceived levels of political risk and the willingness of lenders and investors to provide project financing; availability of labor, labor costs and possible labor strikes; availability of drilling rigs; and governmental regulations, including, without limitation, regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting materials, foreign exchange, environmental protection, employment, worker safety, transportation, and reclamation and closure obligations. Most exploration projects do not result in the discovery of commercially mineable deposits of minerals and there can be no assurance that any of our exploration stage properties will be commercially mineable or can be brought into production.

We may enter into acquisitions, dispositions or other material transactions at any time.

We are regularly engaged in a review of opportunities to acquire or dispose of properties, to partner with other companies on projects or to acquire or merge with companies. We currently, and generally at any time, have such opportunities in various stages of active review, including, for example, our engagement of consultants and advisors to analyze particular opportunities, technical, financial and other confidential information, submission of indications of interest and participation in discussions or negotiations for acquisitions or dispositions. Any such acquisition or disposition could be material to us. We could issue common stock or incur additional indebtedness to fund our acquisitions. Issuances of common stock may dilute existing holders of our securities. In addition, any such acquisition, disposition or other transaction may have other transaction specific risks associated with it, including risks related to the completion of the transaction, the project or the jurisdictions in which the project is located. We could enter into one or more acquisitions, dispositions or other transactions at any time.

The developments at the Fukushima Daiichi Nuclear Power Plant in Japan continue to have a negative impact on the uranium markets and public acceptance of nuclear energy is uncertain.

The developments at the Fukushima Daiichi Nuclear Power Plant following the earthquake and tsunami that struck parts of Japan in March 2011 created heightened concerns regarding the safety of nuclear power plants and the ability to safeguard the material used to fuel nuclear power plants. The impact on the perception of the safety of nuclear power resulting from this event may cause increased volatility of uranium prices in the near to mid-term as well as uncertainty involving the continued use and expansion of nuclear power in certain countries. A reduction in the current or the future generation of electricity from nuclear power could result in a reduced requirement for uranium to fuel nuclear power plants which may negatively impact URI in the future.

Maintaining the demand for uranium at current levels and future growth in demand will depend upon acceptance of nuclear technology as a means of generating electricity. The developments at the Fukushima Daiichi Nuclear Power Plant may affect public acceptance of nuclear technology. Lack of public acceptance of nuclear technology would adversely affect the demand for nuclear power and potentially increase the regulation of the nuclear power industry.

The only significant market for uranium is nuclear power plants world-wide, and there are a limited number of customers.

We are dependent on a limited number of electric utilities that buy uranium for nuclear power plants. Because of the limited market for uranium, a reduction in purchases of newly produced uranium by electric utilities for any reason (such as plant closings) would adversely affect the viability of our business.

The price of alternative energy sources affects the demand for and price of uranium.

The attractiveness of uranium as an alternative fuel to generate electricity may be dependent on the relative prices of oil, gas, coal and hydro-electricity and the possibility of developing other low-cost sources of energy. If the prices of alternative energy sources decrease or new low-cost alternative energy sources are developed, the demand for uranium could decrease, which may result in a decrease in the price of uranium.

Because of the unique difficulties and uncertainties inherent in new mineral exploration ventures, the Company's lithium exploration activities face a high risk of business failure.

Potential investors should be aware of the difficulties normally encountered by new mineral exploration ventures and the high rate of failure of such ventures. The likelihood of success of the Company's lithium exploration activities must be considered in light of the potential problems, expenses, difficulties, complications and delays encountered in connection with the exploration of new mineral properties. These potential problems include, but are not limited to, unanticipated problems relating to exploration and additional costs and expenses that may exceed current estimates. The expenditures to be made by the Company in the exploration of its new lithium claims may not result in the discovery of lithium deposits. Problems such as unusual or unexpected formations and other conditions are involved in new mineral exploration and often result in unsuccessful exploration efforts. If the results of the Company's new exploration ventures do not reveal viable commercial mineralization, it may decide to abandon its claims. If this happens, the Company will not benefit from any of the expenditures it will incur in pursuing the claims.

The Company's experience in uranium exploration may not apply to its plans for lithium exploration or development.

Although the Company and the members of its management team have significant experience in uranium exploration and development that appears to be synergistic with lithium exploration and development, neither the Company nor any member of its management team has directly engaged in the exploration for or development of lithium deposits. In particular, the Company believes there are similarities between the exploration for and development of lithium brines and the

ISR of uranium, but it may not have sufficiently detailed expertise to effectively explore for and develop lithium deposits. The Company's lack of specific lithium experience may lead it to fail to realize the anticipated benefits of its lithium exploration and development activities and may adversely affect its financial condition and results of operations. In addition, the Company may need to hire employees or retain consultants with the requisite experience in lithium exploration and development that are not currently anticipated in the near-term.

Volatility in lithium prices may make it commercially infeasible for the Company to develop its claims and may result in the Company not receiving an adequate return on invested capital.

The Company's lithium exploration and development activities may be significantly adversely affected by volatility in the price of lithium. Mineral prices fluctuate widely and are affected by numerous factors beyond its control such as global and regional supply and demand, interest rates, exchange rates, inflation or deflation, fluctuation in the value of the United States dollar and foreign currencies, and the political and economic conditions of mineral-producing countries throughout the world. The exact effect of these factors cannot be accurately predicted, but the combination of these factors may result in the Company's lithium activities not producing an adequate return on invested capital to be profitable or viable.

Our operations are each subject to environmental risks.

We are required to comply with environmental protection laws, regulations and permitting requirements in the United States and the Republic of Turkey, and we anticipate that we will be required to continue to do so in the future. We have expended significant resources, both financial and managerial, to comply with environmental protection laws, regulations and permitting requirements, and we anticipate that we will be required to continue to do so in the future. The material laws and regulations within the U.S. include the Atomic Energy Act, Uranium Mill Tailings Radiation Control Act of 1978, or UMTRCA, Clean Air Act, Clean Water Act, Safe Drinking Water Act, Federal Land Policy Management Act, National Park System Mining Regulations Act, the State Mined Land Reclamation Acts or State Department of Environmental Quality regulations and the Dodd-Frank Wall Street Reform and Consumer Protection Act, and the rules and regulations of the NNEPA, as applicable.

We are required to comply with the Atomic Energy Act, as amended by UMTRCA, by applying for and maintaining an operating license from the NRC and the state of Texas. Uranium operations must conform to the terms of such licenses, which include provisions for protection of human health and the environment from endangerment due to radioactive materials. The licenses encompass protective measures consistent with the Clean Air Act and the Clean Water Act. Mining operations may be subject to other laws administered by the USEPA and other agencies.

The uranium industry is subject not only to the worker health and safety and environmental risks associated with all mining businesses, but also to additional risks uniquely associated with uranium ISR, mining and milling. The possibility of more stringent regulations exists in the areas of worker health and safety, storage of hazardous materials, standards for heavy equipment used in ISR, mining or milling, the disposition of wastes, the decommissioning and reclamation of exploration, mining and ISR sites, climate change and other environmental matters, each of which could have a material adverse effect on the cost or the viability of a particular project.

We cannot predict what environmental legislation, regulation or policy will be enacted or adopted in the future or how future laws and regulations will be administered or interpreted. The recent trend in environmental legislation and regulation, generally, is toward stricter standards, and this trend is likely to continue in the future. This recent trend includes, without limitation, laws and regulations relating to air and water quality, reclamation, waste handling and disposal, the protection of certain species and the preservation of certain lands. These regulations may require the acquisition of permits or other authorizations for certain activities. These laws and regulations may also limit or prohibit activities on certain lands. Compliance with more stringent laws and regulations, as well as potentially more vigorous enforcement policies or stricter interpretation of existing laws, may necessitate significant capital outlays, may materially affect our results of operations and business or may cause material changes or delays our intended activities.

Our operations may require additional analysis in the future including environmental, cultural and social impact and other related studies. Certain activities require the submission and approval of environmental impact assessments. Environmental assessments of proposed projects carry a heightened degree of responsibility for companies and directors, officers and employees. We cannot provide assurance that we will be able to obtain or maintain all necessary permits that may be required to continue our operation or exploration of our properties or, if feasible, to commence development, construction or operation of mining facilities at such properties on terms which enable operations to be conducted at economically justifiable costs. If we are unable to obtain or maintain permits or water rights for development of our properties or otherwise fail to manage adequately future environmental issues, our operations could be materially and adversely affected.

Closure and remediation costs for environmental liabilities may exceed the provisions we have made.

Natural resource companies are required to close their operations and rehabilitate the lands in accordance with a variety of environmental laws and regulations. Estimates of the total ultimate closure and rehabilitation costs for extractive operations are significant and based principally on current legal and regulatory requirements and closure plans that may change materially. Any underestimated or unanticipated rehabilitation costs could materially affect our financial position, results of operations and cash flows. Environmental liabilities are accrued when they become known, are probable and can be reasonably estimated. Whenever a previously unrecognized remediation liability becomes known, or a previously estimated reclamation cost is increased, the amount of that liability and additional cost will be recorded at that time and could materially reduce our consolidated net income in the related period.

The laws and regulations governing closure and remediation in a particular jurisdiction are subject to review at any time and may be amended to impose additional requirements and conditions which may cause our provisions for environmental liabilities to be underestimated and could materially affect our financial position or results of operations.

Because mineral exploration and development activities are inherently risky, we may be exposed to environmental liabilities and other dangers. If we are unable to maintain adequate insurance, or liabilities exceed the limits of our insurance policies, we may be unable to continue operations.

The business of mineral exploration and extraction involves a high degree of risk. Few properties that are explored are ultimately developed into production. Unusual or unexpected formations, formation pressures, fires, power outages, labor disruptions, flooding, explosions, cave-ins, landslides and the inability to obtain suitable or adequate machinery, equipment or labor are other risks involved in extraction operations and the conduct of exploration programs. Previous mining operations may have caused environmental damage at certain of our properties. It may be difficult or impossible to assess the extent to which such damage was caused by us or by the activities of previous operators, in which case, any indemnities and exemptions from liability may be ineffective. If any of our properties are found to have commercial quantities of minerals, we would be subject to additional risks respecting any development and production activities.

Although we carry liability insurance with respect to our mineral exploration operations, we may become subject to liability for damage to life and property, environmental damage, cave-ins or hazards against which we cannot insure or against which we may elect not to insure because of cost or other business reasons. In addition, the insurance industry is undergoing change and premiums are being increased. If we are unable to procure adequate insurance because of cost, unavailability or otherwise, we might be forced to cease operations.

Reserve and other mineralized material calculations are estimates only, and are subject to uncertainty due to factors including the price of uranium and lithium, inherent variability of the ore and recoverability of uranium and lithium in the recovery process.

The calculation of reserves, other mineralized material tons and grades are estimates and depend upon geological interpretation and geostatistical relationships or assumptions drawn from drilling and sampling analysis, which may prove to

be unpredictable. There is a degree of uncertainty attributable to the calculation of reserves and mineralized material and their corresponding grades. Until reserves and other mineralized materials are actually mined and processed, the quantity of ore and grades must be considered as an estimate only. In addition, the quantity of reserves and other mineralized materials may vary depending on the price of uranium and lithium. Any material change in the quantity of reserves, other mineralized materials, mineralization or grade may affect the economic viability of our properties.

Our inability to obtain financial surety would threaten our ability to continue in business.

Future financial surety requirements to comply with federal and state environmental and remediation requirements and to secure necessary licenses and approvals will increase significantly as future development and production occurs at certain of our sites in the United States and Turkey. The amount of the financial surety for each producing property is subject to annual review and revision by regulators. We expect that the issuer of the financial surety instruments will require us to provide cash collateral for a significant amount of the face amount of the bond to secure the obligation. In the event we are not able to raise, secure or generate sufficient funds necessary to satisfy these requirements, we will be unable to develop our sites and bring them into production, which inability will have a material adverse impact on our business and may negatively affect our ability to continue to operate.

Competition from better-capitalized companies affects prices and our ability to acquire both properties and personnel.

There is global competition for uranium and lithium properties, capital, customers and the employment and retention of qualified personnel. In the production and marketing of uranium and lithium, there are a number of producing entities, some of which are government controlled and all of which are significantly larger and better capitalized than we are. Many of these organizations also have substantially greater financial, technical, manufacturing and distribution resources than we have.

Our future uranium production will also compete with uranium recovered from the de-enrichment of highly enriched uranium obtained from the dismantlement of United States and Russian nuclear weapons and imports to the United States of uranium from the former Soviet Union and from the sale of uranium inventory held by the United States Department of Energy. In addition, there are numerous entities in the market that compete with us for properties and are attempting to become licensed to operate ISR and/or underground mining facilities. If we are unable to successfully compete for properties, capital, customers or employees or with alternative uranium sources, it could have a materially adverse effect on our results of operations.

Because we have limited capital, inherent mining risks pose a significant threat to us compared with our larger competitors.

Because we have limited capital we may be unable to withstand significant losses that can result from inherent risks associated with mining, including environmental hazards, industrial accidents, flooding, earthquake, interruptions due to weather conditions and other acts of nature which larger competitors could withstand. Such risks could result in damage to or destruction of our infrastructure and production facilities, as well as to adjacent properties, personal injury, environmental damage and processing and production delays, causing monetary losses and possible legal liability. Our business could be harmed if we lose the services of our key personnel.

Our business and mineral exploration programs depend upon our ability to employ the services of geologists, engineers and other experts. In operating our business and in order to continue our programs, we compete for the services of professionals with other mineral exploration companies and businesses. In addition, several entities have expressed an interest in hiring certain of our employees. Our ability to maintain and expand our business and continue our exploration programs may be impaired if we are unable to continue to employ or engage those parties currently providing services and expertise to us or identify and engage other qualified personnel to do so in their place. To retain key employees, we may face

increased compensation costs, including potential new stock incentive grants and there can be no assurance that the incentive measures we implement will be successful in helping us retain our key personnel.

The Company has no history of paying dividends on its common stock, and we do not anticipate paying dividends in the foreseeable future.

The Company has not previously paid dividends on its common stock. We currently anticipate that we will retain all of our available cash, if any, for use as working capital and for other general corporate purposes. Any payment of future dividends will be at the discretion of our Board of Directors and will depend upon, among other things, our earnings, financial condition, capital requirements, level of indebtedness, statutory and contractual restrictions applicable to the payment of dividends and other considerations that our Board of Directors deems relevant.

Terms of subsequent financings may adversely impact holders of our securities.

In order to finance our future production plans and working capital needs, we may have to raise funds through the issuance of equity or debt securities. Depending on the type and the terms of any financing we pursue, holders of our securities' rights and the value of their investment in our common stock could be reduced. A financing could involve one or more types of securities including common stock, convertible debt or warrants to acquire common stock. These securities could be issued at or below the then prevailing market price for our common stock. We currently have no authorized preferred stock. In addition, if we issue secured debt securities, the holders of the debt would have a claim to our assets that would be prior to the rights of holders of our securities until the debt is paid. Interest on these debt securities would increase costs and negatively impact operating results. If the issuance of new securities results in diminished rights to holders of our common stock, the market price of our common stock could be negatively impacted.

Shareholders could be diluted if we were to use common stock to raise capital.

We may need to seek additional capital to carry our business plan. This financing could involve one or more types of securities including common stock, convertible debt or warrants to acquire common stock. These securities could be issued at or below the then prevailing market price for our common stock. Any issuance of additional shares of our common stock could be dilutive to existing holders of our securities and could adversely affect the market price of our common stock.

USE OF PROCEEDS

Unless we specify otherwise in a prospectus supplement, we intend to use the net proceeds from our sale of the securities under this prospectus for general corporate purposes, which may include making additions to our working capital, funding future acquisitions, or for any other purpose we describe in the applicable prospectus supplement.

DILUTION

We will set forth in a prospectus supplement and/or free writing prospectus the following information, as required, regarding any dilution of the equity interests of investors purchasing securities in an offering under this prospectus:

- the net tangible book value per share of our equity securities before and after the offering;
- the amount of the change in such net tangible book value per share attributable to the cash payments made by purchasers in the offering; and
- the amount of the immediate dilution from the public offering price which will be absorbed by such purchasers.

RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth the historical ratios of earnings to fixed charges for the Company and its consolidated subsidiaries for the periods indicated. As the ratios of earnings to fixed charges indicate less than one-to-one coverage in each of the years presented, we have provided the coverage deficiency amounts for those periods. You should read these figures in connection with our consolidated financial statements, including the notes to those statements, incorporated by reference in this prospectus.

	Year Ended December 31,				
	2016	2015	2014	2013	2012
	(in thousands)				
Deficiency of earnings available to cover					
fixed charges(1)	\$ (19,605)	\$ (15,143)	\$ (10,684)	\$ (20,294)	\$(19,361)

(1) For the purpose of computing the ratio of earnings to fixed charges, earnings consist of reported net loss plus fixed charges. Fixed charges consist of interest expensed and capitalized, amortization of debt issuance costs and that portion of rental expense we believe to be representative of interest. Due to losses for the years ended December 31, 2016, 2015, 2014, 2013, and 2012, earnings were insufficient to cover fixed charges for these periods.

For the periods indicated above, we had no authorized or outstanding shares of preferred stock. Therefore, the ratios of earnings to combined fixed charges and preferred stock dividends are identical to the ratios presented in the tables above.

DESCRIPTION OF SECURITIES

Common Stock

The following description of our common stock and the material provisions of our restated certificate of incorporation, as amended, and amended and restated bylaws is only a summary. You should refer to the terms of our common stock contained in our restated certificate of incorporation, as amended, and our amended and restated bylaws for more complete information.

Our authorized capital stock consists of 100,000,000 shares of common stock, par value \$0.001 per share. As of March 3, 2017, approximately 24.5 million shares of our common stock were issued and outstanding, all of which are fully paid and non-assessable. In addition, there were approximately 0.3 million shares of our common stock issuable upon exercise of outstanding stock options and warrants and upon vesting of outstanding restricted stock units as of December 31, 2016. Our common stock is currently traded on the Nasdaq Capital Market under the symbol "URRE."

There are no other preemptive, subscription, conversion or redemption rights pertaining to our common stock. The absence of preemptive rights could result in a dilution of the interest of existing holders of our securities should additional shares of common stock be issued. Holders of our common stock are entitled to receive such dividends as may be declared by our Board of Directors out of assets legally available therefore and to share ratably in our assets upon liquidation.

Each share of our common stock is entitled to one vote for all purposes and cumulative voting is not permitted in the election of directors. Accordingly, the holders of more than fifty percent of all of the outstanding shares of our common stock can elect all of the directors. Matters to be voted upon by the holders of our common stock require the affirmative vote of a majority of the votes cast at a stockholders meeting at which a quorum is present. The presence, in person or by proxy, of the holders of one-third of our outstanding shares is necessary to constitute a quorum at a stockholders meeting.

Computershare Trust Company, Canton, Massachusetts is the transfer agent and registrar for our common stock.

Possible Anti-Takeover Effects of Delaware Law and our Certificate of Incorporation and Bylaws

Certain provisions of Delaware law, our restated certificate of incorporation and our amended and restated bylaws discussed below could discourage or make it more difficult to accomplish a proxy contest or other change in our management

or the acquisition of control by a holder of a substantial amount of our common stock. It is possible that these provisions could make it more difficult to accomplish, or could deter, transactions that holders of our securities may otherwise consider to be in their best interests or in our best interests. These provisions are intended to enhance the likelihood of continuity and stability in the composition of our Board of Directors and in the policies formulated by the Board of Directors and may discourage certain types of transactions that may involve an actual or threatened change of control of us. The provisions also are intended to discourage certain tactics that may be used in proxy fights. Such provisions also may have the effect of preventing changes in our management.

Delaware Statutory Business Combinations Provision. We are subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. For purposes of Section 203, a "business combination" is defined broadly to include a merger, asset sale or other transaction resulting in a financial benefit to the interested stockholder, and, subject to certain exceptions, an "interested stockholder" is a person who, together with his or her affiliates and associates, owns (or within three years prior, did own) 15% or more of the corporation's voting stock.

Authorized but Unissued Stock. Our restated certificate of incorporation authorizes the issuance of up to 100,000,000 shares of capital stock, par value \$0.001 per share. As of March 3, 2017 approximately 24.5 million shares of our common stock were issued and outstanding. Our Board of Directors has the authority, without further approval of the stockholders, to issue such shares, which would adversely affect the voting power and ownership interest of holders of our common stock. This authority may have the effect of deterring hostile takeovers, delaying or preventing a change in control, and discouraging bids for our common stock at a premium over the market price.

Advance Notice Provisions for Stockholder Proposals and Stockholder Nominations of Directors. Our amended and restated bylaws provide that, for nominations to the Board of Directors or for other business to be properly brought by a stockholder before a meeting of stockholders, the stockholder must first have given timely notice of the proposal in writing to our Secretary. For an annual meeting, a stockholder's notice generally must be delivered not less than 90 days nor more than 120 days prior to the first anniversary of the preceding year's annual meeting. Detailed requirements as to the form of the notice and information required in the notice are specified in the amended and restated bylaws. If it is determined that business was not properly brought before a meeting in accordance with our bylaw provisions, such business will not be conducted at the meeting.

Amendment of Bylaws. Our Board of Directors is expressly authorized to alter or repeal our bylaws.

Special Meetings of Stockholders. Special meetings of the stockholders may be called only by our Chairman, President or pursuant to a resolution adopted by a majority of the total number of directors. Stockholders may not propose business to be brought before a special meeting of the stockholders.

Debt Securities

Our debt securities may be issued from time to time in one or more series and may include senior debt securities, subordinated debt securities, convertible debt securities and exchangeable debt securities. The particular terms of any series of debt securities and the extent to which the general provisions may apply to a particular series of debt securities will be described in the prospectus supplement relating to that series. When describing any debt securities, references to "we", "us" and "our" refer to the issuer of those debt securities and not to any of its subsidiaries.

The debt securities we offer will be issued under an indenture between us and the trustee named in the indenture. You should also read the indenture under which the debt securities are to be issued. We have filed a form of indenture governing different types of debt securities with the SEC as an exhibit to the registration statement of which this prospectus is a part. The following summary of the indenture does not purport to be complete and is subject to, and qualified in its entirety by reference to, all of the provisions of the indenture, including definitions therein of certain terms. A form of each debt security, reflecting the specific terms and provisions of that series of debt securities, will be filed with the SEC in connection with each offering and will be incorporated by reference in the registration statement of which this prospectus forms a part.

You may obtain a copy of the indenture and any form of debt security that has been filed in the manner described under "Where You Can Find More Information."

For a comprehensive description of any series of debt securities being offered to you pursuant to this prospectus, you should read this prospectus and the applicable prospectus supplement, indenture and form of debt security.

General Terms of the Indenture

The indenture does not limit the amount of debt securities that we may issue. The indenture does provide that we may issue debt securities up to the principal amount that we may authorize, which may be in any currency or currency unit that we may designate. Except for the limitations on consolidation, merger and sale of all or substantially all of our assets contained in the indenture, the terms of the indenture do not contain any covenants or other provisions designed to give holders of any debt securities protection against changes in our operations, financial condition or transactions involving us. For each series of debt securities, any restrictive covenants for those debt securities will be described in the applicable prospectus supplement for those debt securities.

We may issue the debt securities issued under the indenture as "discount securities," which means they may be sold at a discount below their stated principal amount. These debt securities, as well as other debt securities that are not issued at a discount, may, for United States federal income tax purposes, be treated as if they were issued with "original issue discount," or OID, because of interest payment and other characteristics. Special United States federal income tax considerations applicable to debt securities issued with original issue discount will be described in more detail in any applicable prospectus supplement.

You should refer to the prospectus supplement relating to a particular series of debt securities for a description of the following terms of the debt securities offered by that prospectus supplement and by this prospectus:

- the title and authorized denominations of those debt securities:
- any limit on the aggregate principal amount of that series of debt securities;
- the date or dates on which principal and premium, if any, of the debt securities of that series is payable;
- interest rates, and the dates from which interest, if any, on the debt securities of that series will accrue, and the dates when interest is payable and the maturity;
- the right, if any, to extend the interest payment periods and the duration of the extensions;
- the guarantors, if any, of our obligations under the debt securities;
- if the amount of payments of principal or interest is to be determined by reference to an index or formula, or based on a coin or currency other than that in which the debt securities are stated to be payable, the manner in which these amounts are determined and the calculation agent, if any, with respect thereto;
- the place or places where and the manner in which principal of, premium, if any, and interest, if any, on the debt securities of that series will be payable and the place or places where those debt securities may be presented for transfer and, if applicable, conversion or exchange;
- the period or periods within which, the price or prices at which, the currency or currencies in which, and other terms and conditions upon which those debt securities may be redeemed, in whole or in part, at our option or the option of a holder of those securities, if we or a holder is to have that option;
- our obligation or right, if any, to redeem, repay or purchase those debt securities pursuant to any sinking fund or analogous provision or at the option of a holder of those securities, and the terms and conditions

upon which the debt securities will be redeemed, repaid or purchased, in whole or in part, pursuant to that obligation;

- the terms, if any, on which the debt securities of that series and any guarantees thereof will be subordinate in right and priority of payment to our other debt;
- the denominations in which those debt securities will be issuable;
- if other than the entire principal amount of the debt securities when issued, the portion of the principal amount payable upon acceleration of maturity as a result of a default on our obligations;
- whether those debt securities will be issued in fully registered form without coupons or in a form registered as to principal only with coupons or in bearer form with coupons;
- whether any securities of that series are to be issued in whole or in part in the form of one or more global securities and the depositary for those global securities;
- if other than United States dollars, the currency or currencies in which payment of principal of or any premium or interest on those debt securities will be payable;
- if the principal of or any premium or interest on the debt securities of that series is to be payable, or is to be payable at our election or the election of a holder of those securities, in securities or other property, the type and amount of those securities or other property, or the manner of determining that amount, and the period or periods within which, and the terms and conditions upon which, any such election may be made;
- the events of default and covenants relating to the debt securities that are in addition to, modify or delete those described in this prospectus;
- conversion or exchange provisions, if any, including conversion or exchange prices or rates and adjustments thereto;
- whether and upon what terms the debt securities may be defeased, if different from the provisions set forth in the indenture;
- the nature and terms of any security for any secured debt securities;
- the terms applicable to any debt securities issued at a discount from their stated principal amount; and
- any other specific terms of any debt securities.

The applicable prospectus supplement will present material United States federal income tax considerations for holders of any debt securities and the securities exchange or quotation system on which any debt securities are to be listed or quoted.

Conversion or Exchange Rights

Debt securities may be convertible into or exchangeable for shares of the Company's common stock or other securities. The terms and conditions of conversion or exchange will be stated in the applicable prospectus supplement. The terms will include, among others, the following:

- the conversion or exchange price;
- the conversion or exchange period;

- provisions regarding our ability or the ability of any holder to convert or exchange the debt securities;
- events requiring adjustment to the conversion or exchange price; and
- provisions affecting conversion or exchange in the event of our redemption of the debt securities.

Consolidation, Merger or Sale

The terms of the indenture prevent us from consolidating or merging with or into, or conveying, transferring or leasing all or substantially all of our assets to, any person, unless (i) we are the surviving corporation or the successor corporation or person to which our assets are conveyed, transferred or leased is organized under the laws of the United States, any state of the United States or the District of Columbia and it expressly assumes our obligations under the debt securities and the indenture, and (ii) immediately after completing such a transaction, no event of default under the indenture, and no event that, after notice or lapse of time or both, would become an event of default under the indenture, has occurred and is continuing. When the person to whom our assets are conveyed or transferred has assumed our obligations under the debt securities and the indenture, we will be discharged from all our obligations under the debt securities and the indenture except in limited circumstances.

This covenant would not apply to any recapitalization transaction, a change of control affecting us or a highly leveraged transaction, unless the transaction or change of control were structured to include a merger or consolidation or conveyance, transfer or lease of all or substantially all of our assets.

Events of Default

The indenture provides that the following will be "events of default" with respect to any series of debt securities:

- failure to pay interest for 30 days after the date payment is due and payable;
- failure to pay principal or premium, if any, on any debt security when due, either at maturity, upon any redemption, by declaration or otherwise;
- failure to make sinking fund payments when due and continuance of such default for a period of 30 days;
- failure to perform other covenants for 60 days after notice of such default or breach and request for it to be remedied;
- events in bankruptcy, insolvency or reorganization relating to us; or
- any other event of default provided in the applicable officer's certificate, resolution of our Board of Directors or the supplemental indenture under which we issue a series of debt securities.

An event of default for a particular series of debt securities does not necessarily constitute an event of default for any other series of debt securities issued under the indenture. For each series of debt securities, any modifications to the above events of default will be described in the applicable prospectus supplement for those debt securities.

The indenture provides that if an event of default specified in the first, second, third, fourth or sixth bullets above occurs and is continuing, either the trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series may declare the principal amount of all those debt securities (or, in the case of discount securities or indexed securities, that portion of the principal amount as may be specified in the terms of that series) to be due and payable immediately. If an event of default specified in the fifth bullet above occurs and is continuing, then the principal amount of all those debt securities (or, in the case of discount securities or indexed securities, that portion of the principal amount as may be specified in the terms of that series) will be due and payable immediately, without any declaration or other act on the part of the trustee or any holder. In certain cases, the holders of a majority in principal amount of the outstanding debt securities of any series may, on behalf of holders of all those debt securities, waive any past default and consequences of such default.

The indenture imposes limitations on suits brought by holders of debt securities against us. Except for actions for payment of overdue principal or interest, no holder of debt securities of any series may institute any action against us under the indenture unless:

- the holder has previously given to the trustee written notice of a continuing default;
- the holders of at least 25% in principal amount of the outstanding debt securities of the affected series have requested that the trustee institute the action;
- the requesting holders have offered the trustee indemnity for the costs, expenses and liabilities that may be incurred by bringing the action;
- the trustee has not instituted the action within 60 days of the request and offer of indemnity; and the trustee has not received inconsistent direction by the holders of a majority in principal amount of the outstanding debt securities of the affected series.

We will be required to file annually with the trustee a certificate, signed by one of our officers, stating whether or not the officer knows of any default by us in the performance, observance or fulfillment of any condition or covenant of the indenture.

Discharge, Defeasance and Covenant Defeasance

We can discharge or decrease our obligations under the indenture as stated below.

We may discharge obligations to holders of any series of debt securities that have not already been delivered to the trustee for cancellation and that have either become due and payable or are by their terms to become due and payable, or are scheduled for redemption, within one year. We may effect a discharge by irrevocably depositing with the trustee cash or government obligations denominated in the currency of the debt securities, as trust funds, in an amount certified to be enough to pay when due, whether at maturity, upon redemption or otherwise, the principal of, and any premium and interest on, the debt securities and any mandatory sinking fund payments.

Unless otherwise provided in the applicable prospectus supplement, we may also discharge certain of our obligations to holders of any series of debt securities at any time, which we refer to as defeasance. We may also be released from the obligations imposed by certain covenants of outstanding series of debt securities and provisions of the indenture, and we may omit to comply with those covenants without creating an event of default under the indenture, which we refer to as covenant defeasance. We may effect defeasance and covenant defeasance only if, among other things:

- we irrevocably deposit with the trustee cash or government obligations denominated in the currency of the debt securities, as trust funds, in an amount certified by a nationally recognized firm of independent certified accountants to be enough to pay at maturity, or upon redemption, the principal (including any mandatory sinking fund payments) of, and any premium and interest on, all outstanding debt securities of the series: and
- we deliver to the trustee an opinion of counsel to the effect that the holders of the series of debt securities will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the defeasance or covenant defeasance and that defeasance or covenant defeasance will not otherwise alter the holders' U.S. federal income tax treatment of principal, and any premium and interest payments on, the series of debt securities.

In the case of a defeasance by us, the opinion we deliver must be based on a ruling of the Internal Revenue Service issued, or a change in U.S. federal income tax law occurring, after the date of the indenture.

Although we may discharge or decrease our obligations under the indenture as described in the preceding paragraphs, we may not discharge certain enumerated obligations, including but not limited to, our duty to register the

transfer or exchange of any series of debt securities, to replace any temporary, mutilated, destroyed, lost or stolen series of debt securities or to maintain an office or agency in respect of any series of debt securities.

Modification of the Indenture

The indenture provides that we and the trustee may enter into supplemental indentures without the consent of the holders of debt securities to, among other things:

- evidence the assumption by a successor entity of our obligations;
- add to our covenants for the benefit of the holders of debt securities, or to surrender any rights or power conferred upon us;
- add any additional events of default;
- cure any ambiguity or correct any inconsistency or defect in the indenture provided that it does not adversely affect the interests of the holders of any outstanding debt securities in any material respect;
- add to, change or eliminate any of the provisions of the indenture in a manner that will become effective only when there is no outstanding debt security which is entitled to the benefit of the provision as to which the modification would apply;
- add guarantees to or secure any debt securities;
- establish the forms or terms of debt securities of any series;
- evidence and provide for the acceptance of appointment by a successor trustee and add to or change any of the provisions of the indenture as is necessary for the administration of the trusts by more than one trustee;
- add to or change any provision of the indenture as is necessary to permit or facilitate the issuance of debt securities in bearer form:
- change the location of (i) payment of principal, premium or interest; (ii) surrender of the debt securities for registration, transfer or exchange and (iii) notices and demands to or upon us;
- supplement any provision of the indenture to permit or facilitate the defeasance and discharge of any debt securities provided that it does not adversely affect the interests of the holders of any outstanding debt securities in any material respect;
- conform the terms of any debt securities to the description of such debt securities in the prospectus and prospectus supplement offering the debt securities provided that it does not adversely affect the interests of the holders of any outstanding debt securities in any material respect;
- eliminate any provision that was required at the time we entered into the indenture but, as a result of an amendment to the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act"), is no longer required;
- modify, eliminate or add to the provisions of the indenture to effect or evidence any change required by an amendment to the Trust Indenture Act; and
- make any other provisions with respect to matters or questions arising under the indenture as long as the new provisions do not adversely affect the interests of the holders of any outstanding debt securities of any series created prior to the modification in any material respect.

Any provision of the indenture shall automatically be deemed to have been modified, eliminated or added to the extent required to be made as a result of an amendment to the Trust Indenture Act.

The indenture also provides that we and the trustee may, with the consent of the holders of not less than a majority in aggregate principal amount of debt securities of each series of debt securities affected by such supplemental indenture then outstanding, add any provisions to, or change in any manner, eliminate or modify in any way the provisions of, the indenture or any supplemental indenture or modify in any manner the rights of the holders of the debt securities. We and the trustee may not, however, without the consent of the holder of each outstanding debt security affected thereby:

- extend the final maturity of any debt security;
- reduce the principal amount or premium, if any;
- reduce the rate or extend the time of payment of interest;
- change the method of calculating the rate of interest in a manner adverse to the holders of any outstanding debt securities;
- reduce the amount of the principal of any debt security issued with an original issue discount that is payable upon acceleration;
- change the currency in which the principal, and any premium or interest, is payable;
- impair the right to institute suit for the enforcement of any payment on any debt security when due;
- if applicable, adversely affect the right of a holder to convert or exchange a debt security; or
- reduce the percentage of holders of debt securities of any series whose consent is required for any modification of the indenture or for waivers of compliance with or defaults under the indenture with respect to debt securities of that series.

The indenture provides that the holders of not less than a majority in aggregate principal amount of the then outstanding debt securities of any series, by notice to the trustee, may on behalf of the holders of the debt securities of that series waive any default and its consequences under the indenture except:

- a default in the payment of the principal of or premium or interest on any such debt security; or
- a default in respect of a covenant or provision of the indenture that cannot be modified or amended without the consent of the holder of each outstanding debt security of each series affected.

Registered Global Securities and Book Entry System

The debt securities of a series may be issued in whole or in part in book-entry form and may be represented by one or more fully registered global securities. We will deposit any registered global securities with a depositary or with a nominee for a depositary identified in the applicable prospectus supplement or with its custodian and such global securities shall be registered in the name of such depositary or nominee. In such case, we will issue one or more registered global securities denominated in an amount equal to the aggregate principal amount of all of the debt securities of the series to be issued and represented by such registered global security or securities. This means that we will not issue certificates to each holder.

Unless and until it is exchanged in whole or in part for debt securities in definitive registered form, a registered global security may not be transferred except as a whole:

- by the depositary for the registered global security to its nominee;
- by a nominee of the depositary to the depositary or another nominee of the depositary; or
- by the depositary or its nominee to a successor of the depositary or a nominee of the successor.

The prospectus supplement relating to a series of debt securities will describe the specific terms of the depositary arrangement involving any portion of the series represented by a registered global security. We anticipate that the following provisions will apply to all depositary arrangements for debt securities:

- ownership of beneficial interests in a registered global security will be limited to persons that have accounts with the depositary for such registered global security, these persons being referred to as "participants," or persons that may hold interests through participants;
- upon the issuance of a registered global security, the depositary for the registered global security will credit, on its book-entry registration and transfer system, the participants' accounts with the respective principal amounts of the debt securities represented by the registered global security beneficially owned by the participants;
- any dealers, underwriters or agents participating in the distribution of the debt securities will designate the accounts to be credited; and
- ownership of beneficial interest in the registered global security will be shown on, and the transfer of the
 ownership interest will be effected only through, records maintained by the depositary for the registered
 global security for interests of participants, and on the records of participants for interests of persons
 holding through participants.

The laws of some states may require that specified purchasers of securities take physical delivery of the securities in definitive form. These laws may limit the ability of those persons to own, transfer or pledge beneficial interests in registered global securities.

So long as the depositary for a registered global security, or its nominee, is the registered owner of the registered global security, the depositary or such nominee, as the case may be, will be considered the sole owner or holder of the debt securities represented by the registered global security for all purposes under the indenture. Except as stated below, owners of beneficial interests in a registered global security:

- will not be entitled to have the debt securities represented by a registered global security registered in their names;
- will not receive or be entitled to receive physical delivery of the debt securities in the definitive form; and
- will not be considered the owners or holders of the debt securities under the indenture.

Accordingly, each person owning a beneficial interest in a registered global security must rely on the procedures of the depositary for the registered global security and, if the person is not a participant, on the procedures of a participant through which the person owns its interest, to exercise any rights of a holder under the indenture.

We understand that under existing industry practices, if we request any action of holders or if an owner of a beneficial interest in a registered global security desires to give or take any action that a holder is entitled to give or take under the indenture, the depositary for the registered global security would authorize the participants holding the relevant beneficial interests to give or take the action, and the participants would authorize beneficial owners owning through the participants to give or take the action or would otherwise act upon the instructions of beneficial owners holding through them.

We will make payments of principal and premium, if any, and interest, if any, on debt securities represented by a registered global security registered in the name of a depositary or its nominee to the depositary or its nominee, as the case may be, as the registered owners of the registered global security.

Neither we nor the trustee, or any other agent of ours or the trustee will be responsible or liable for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the registered global security or for maintaining, supervising or reviewing any records relating to the beneficial ownership interests.

We expect that the depositary for any debt securities represented by a registered global security, upon receipt of any payments of principal and premium, if any, and interest, if any, in respect of the registered global security, will immediately credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the registered global security as shown on the records of the depositary. We also expect that standing customer instructions and customary practices will govern payments by participants to owners of beneficial interests in the registered global security held through the participants, as is now the case with the securities held for the accounts of customers in bearer form or registered in "street name." We also expect that any of these payments will be the responsibility of the participants.

If the depositary for any debt securities represented by a registered global security is at any time unwilling or unable to continue as depositary, we will appoint an eligible successor depositary. If we fail to appoint an eligible successor depositary within 90 days, or if an event of default has occurred and is continuing and the holders of a majority in aggregate principal amount of the then outstanding debt securities of any series so request, we will issue the debt securities in definitive form in exchange for the registered global security. In addition, we may at any time and in our sole discretion and subject to the depositary's procedures decide not to have any of the debt securities of a series represented by one or more registered global securities. In that event, we will issue debt securities of the series in a definitive form in exchange for all of the registered global securities representing the debt securities. The trustee will register any debt securities issued in definitive form in exchange for a registered global security in the name or names as the depositary, based upon instructions from its participants, shall instruct the trustee.

We may also issue bearer debt securities of a series in the form of one or more global securities, referred to as "bearer global securities." We will deposit these securities with a depositary identified in the prospectus supplement relating to the series. The prospectus supplement relating to a series of debt securities represented by a bearer global security will describe the applicable terms and procedures. These will include the specific terms of the depositary arrangement and any specific procedures for the issuance of debt securities in definitive form in exchange for a bearer global security, in proportion to the series represented by a bearer global security.

Concerning the Trustee

The indenture provides that in the event that the trustee resigns or is removed with respect to less than all series of debt securities outstanding under the indenture, there may be more than one trustee under the indenture. If there are different trustees for different series of debt securities under the indenture, each such trustee will be a trustee of a trust under the indenture separate and apart from the trust administered by any other trustee under the indenture. Except as otherwise indicated in this prospectus or any prospectus supplement, any action permitted to be taken by a trustee may be taken by such trustee only on the one or more series of debt securities for which it is the trustee under the indenture. Any trustee under the indenture may resign or be removed from one or more series of debt securities.

The indenture provides that, except during the continuance of an event of default, the trustee will perform only such duties as are specifically set forth in the indenture. During the existence of an event of default, the trustee will exercise those rights and powers vested in it under the indenture and use the same degree of care and skill in its exercise as a prudent person would exercise under the circumstances in the conduct of such person's own affairs.

The trustee may engage in other transactions with us. If the trustee acquires any conflicting interest relating to any duties concerning the debt securities, however, the trustee must eliminate the conflict or resign as trustee.

No Individual Liability of Incorporators, Stockholders, Officers or Directors

The indenture provides that no past, present or future director, officer, stockholder or employee of ours, any of our affiliates, or any successor corporation, in their capacity as such, shall have any individual liability for any of our obligations, covenants or agreements under the debt securities or the indenture.

Governing Law

The indenture is, and any debt securities will be, governed by, and construed in accordance with, the laws of the State of New York.

Warrants

We may issue warrants for the purchase of common stock in one or more series. We may issue warrants independently or together with common stock, and the warrants may be attached to or separate from these securities. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. The terms of any warrants offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement, including a form of warrant certificate, that describes the terms of the particular series of warrants we are offering before the issuance of the related series of warrants. The following summaries of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to the particular series of warrants that we may offer under this prospectus. We urge you to read the applicable prospectus supplements related to the particular series of warrants that we may offer under this prospectus, as well as any related free writing prospectuses, and the complete warrant agreements and warrant certificates that contain the terms of the warrants.

General

We will describe in the applicable prospectus supplement the terms of the series of warrants being offered, including:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- the number of shares of common stock purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreements and warrants may be modified;
- a discussion of any material or special United States federal income tax consequences of holding or exercising the warrants;

- the terms of the securities issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent or the Company in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, the warrants and warrant agreements will be governed by and construed in accordance with the laws of the State of New York.

Enforceability of Rights by Holders of Warrants

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

Units

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the units that we may offer under this prospectus. While the terms summarized below will apply generally to any units that we may offer, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. If we indicate in the prospectus supplement, the terms of any units offered under that prospectus supplement may differ from the terms described below. Specific unit agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement that includes this prospectus.

General

We may issue units consisting of common stock, debt securities or warrants. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the series of units being offered, including:

- the designation and terms of the units and of the common stock, debt securities and warrants comprising
 the units, including whether and under what circumstances those securities may be held or transferred
 separately;
- any provisions of the governing unit agreement that differ from those described below; and
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

We may issue units in such amounts and in such numbers of distinct series as we determine.

The provisions described in this section, as well as those described under "Description of Securities—Common Stock," "Description of Securities—Debt Securities" and "Description of Securities—Warrants" will apply to each unit, as applicable, and to any common stock, debt security and warrant included in each unit, as applicable.

Unit Agent

The name and address of the unit agent for any units we offer will be set forth in the applicable prospectus supplement.

Enforceability of Rights by Holders of Units

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

PLAN OF DISTRIBUTION

We may sell the securities covered by this prospectus from time to time in one or more offerings. Registration of the securities covered by this prospectus does not mean, however, that those securities will necessarily be offered or sold.

We may sell the securities separately or together

- through one or more underwriters or dealers in a public offering and sale by them;
- directly to investors;
- through agents; or
- through any combination of any of these methods of sale.

We may sell the securities from time to time:

- in one or more transactions at a fixed price or prices, which may be changed from time to time;
- at market prices prevailing at the times of sale;
- in "at the market offerings," within the meaning of Rule 415(a)(4) of the Securities Act of 1933, as amended (the "Securities Act"), to or through a sales agent or market maker or into an existing trading market, on an exchange or otherwise;
- at prices related to such prevailing market prices; or
- at negotiated prices.

We will describe the method of distribution of the securities and the terms of the offering in the prospectus supplement or free writing prospectus. Any discounts or concessions allowed or re-allowed or paid to dealers may be changed from time to time.

We may engage in at-the-market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act, and we may also sell securities through a rights offering, forward contracts or similar arrangements. In any distribution of subscription rights to stockholders, if all of the underlying securities are not subscribed for, we may then sell the unsubscribed securities directly to third parties or may engage the services of one or more underwriters, dealers or agents, including standby underwriters, to sell unsubscribed securities to third parties.

If underwriters are used in the sale of any securities, the securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions described above. The securities may be either offered to the public through underwriting syndicates represented by managing underwriters, or directly by underwriters. Generally, the underwriters' obligations to purchase the securities will be subject to conditions precedent and the underwriters will be obligated to purchase all of the securities if they purchase any of the securities. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement or free writing prospectus, naming the underwriter, the nature of any such relationship.

We may designate agents to sell the securities. Unless otherwise specified in connection with any particular sale of securities, the agents will agree to use their best efforts to solicit purchases for the period of their appointment.

We may authorize underwriters, dealers or agents to solicit offers by certain purchasers to purchase the securities from us at the public offering price set forth in the prospectus supplement or free writing prospectus pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. The contracts will be subject only to those conditions set forth in the prospectus supplement or free writing prospectus, and the prospectus supplement or free writing prospectus will set forth any commissions we pay for solicitation of these contracts.

We may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement or in a post-effective amendment.

Underwriters, dealers and agents may be entitled to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, or to contribution with respect to payments made by the underwriters, dealers or agents, under agreements between us and the underwriters, dealers and agents.

We may grant underwriters who participate in the distribution of securities an option to purchase additional securities to cover over-allotments, if any, in connection with the distribution.

Underwriters, dealers or agents may receive compensation in the form of discounts, concessions or commissions from us or our purchasers, as their agents in connection with the sale of securities. These underwriters, dealers or agents may be considered to be underwriters under the Securities Act. As a result, discounts, commissions or profits on resale received by the underwriters, dealers or agents may be treated as underwriting discounts and commissions. The prospectus supplement or free writing prospectus will identify any such underwriter, dealer or agent and describe any compensation received by them from us. Any initial public offering price and any discounts or concessions allowed or re-allowed or paid to dealers may be changed from time to time.

Unless otherwise specified in the related prospectus supplement, all securities we offer, other than common stock, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. Any common stock sold pursuant to a prospectus supplement or free writing prospectus will be listed for trading on the Nasdaq or other principal market for our common stock. We may apply to list any series of debt securities or warrants on an exchange, but we are not obligated to do so. Therefore, there may not be liquidity or a trading market for any series of securities.

Any underwriter may engage in over-allotment transactions, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time. We make no representation or prediction as to the direction or magnitude of any effect that such transactions may have on the price of the securities. For a description of these activities, see the information under the heading "Underwriting" or "Plan of Distribution" in the applicable prospectus supplement.

Underwriters, broker-dealers or agents who may become involved in the sale of the common stock may engage in transactions with and perform other services for us in the ordinary course of their business for which they receive compensation.

LEGAL MATTERS

The validity of the securities offered by this prospectus will be passed upon for us by Hogan Lovells US LLP, Denver, Colorado.

EXPERTS

The consolidated financial statements of Uranium Resources, Inc. for the fiscal years ended December 31, 2016 and December 31, 2015 incorporated by reference herein have been audited by Hein & Associates LLP, independent registered public accounting firm, as set forth in their report, incorporated by reference herein, and are incorporated by reference in reliance upon that report given on the authority of Hein & Associates LLP as experts in accounting and auditing.