UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM S-8 REGISTRATION STATEMENT UNDER

THE SECURITIES ACT OF 1933

GEVO, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

87-0747704 (I.R.S. Employer Identification No.)

345 Inverness Drive South, Building C, Suite 310 Englewood, CO 80112 (Address of Principal Executive Offices)(Zip Code)

Amended and Restated 2010 Stock Incentive Plan (Full title of the plan)

Patrick R. Gruber, Ph.D. Chief Executive Officer Gevo, Inc. 345 Inverness Drive South, Building C, Suite 310 Englewood, CO 80112 (Name and address of agent for service)

(303) 858-8358 (Telephone number, including area code, of agent for service)

> Copy To: Deyan Spiridonov, Esq. Teri O'Brien, Esq. Paul Hastings LLP 4747 Executive Drive, 12th Floor San Diego, CA 92121

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer \Box

Non-accelerated filer (Do not check if a smaller reporting company)

Accelerated filer \Box

Smaller reporting company

CALCULATION OF THE REGISTRATION FEE

Title of securities	Amount to be	Proposed maximum offering price	Proposed maximum aggregate	Amount of	
to be registered	registered(1)	per share	offering price	registration fee	
Common Stock, par value \$0.01 per share	1,000,000(2)	\$2.26(3)	\$2,260,000(3)	\$262.61	

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers any additional shares of the common stock, par value \$0.01 per share (the "Common Stock"), of Gevo, Inc. (the "Registrant") that may be offered or issued under the plans to prevent dilution resulting from stock splits, stock dividends, recapitalizations, or similar transactions.
- (2) Represents 1,000,000 shares of Common Stock reserved for future grant under the Registrant's Amended and Restated 2010 Stock Incentive Plan, as amended (the "2010 Plan"). The Registrant previously registered 371,419 shares of Common Stock under the 2010 Plan and 192,951 shares of Common Stock under the Registrant's 2006 Omnibus Securities and Incentive Plan (the "2006 Plan"), each adjusted to reflect the reverse stock split the Company effected on April 20, 2015. To the extent outstanding awards under the 2006 Plan expire, or are forfeited, cancelled, settled, or become unexercisable without the issuance of shares, the shares of Common Stock subject to such awards will be available for future issuance under the 2010 Plan.
- (3) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(h) and Rule 457(c) under the Securities Act, based upon the average of the high and low prices of the Common Stock on September 22, 2015, as quoted on the NASDAQ Capital Market. Pursuant to General Instruction E of Form S-8, the registration fee is calculated with respect to the additional securities registered on this Registration Statement only.

This Registration Statement will become effective upon filing in accordance with Rule 462 under the Securities Act.

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EXPLANATORY NOTE

This Registration Statement on Form S-8 is being filed by Gevo, Inc., a Delaware corporation (the "Company"), to register an additional 1,000,000 shares of common stock, par value \$0.01 per share (the "Common Stock"), reserved for issuance under the Company's Amended and Restated 2010 Stock Incentive Plan, as amended.

Pursuant to General Instruction E of Form S-8, this Registration Statement hereby incorporates by reference the contents of the Company's registration statement on Form S-8 filed with the Securities and Exchange Commission (the "Commission") on March 11, 2011 (File No. 333-172771) and the Company's registration statement on Form S-8 filed with the Commission on April 14, 2014 (File No. 333-195264) (together, the "Prior Registration Statements") and relates to securities of the same class as that to which the Prior Registration Statements relate.

Item 3.Incorporation of Documents by Reference.

The following documents, which have been filed by the Company with the Commission pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are hereby incorporated by reference, and shall be deemed to be a part hereof:

- (a) the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2014, filed on March 30, 2015;
- (b) the Company's Amended Annual Report on Form 10-K/A for the fiscal year ended December 31, 2014, filed on April 2, 2015;
- (c) the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2015, filed on May 13, 2015;
- (d) the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2015, filed on August 7, 2015;
- (e) the Company's Current Reports on Form 8-K (including Amended Current Reports on Form 8-K/A) filed with the Commission on January 2, 2015, January 20, 2015, January 27, 2015, January 30, 2015, February 4, 2015, February 12, 2015, February 17, 2015, April 14, 2015, April 22, 2015, May 12, 2015, May 15, 2015, May 20, 2015, June 1, 2015, June 3, 2015, July 10, 2015, July 20, 2015, August 4, 2015, August 27 and September 24; and
- (f) the description of the Company's Common Stock contained in the Company's Registration Statement on Form 8-A filed under Section 12(b) of the Exchange Act on February 4, 2011, including any subsequent amendment or report filed with the Commission for the purpose of amending such description.

All documents filed by the Company pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, are incorporated by reference in this Registration Statement and are a part hereof from the date of filing of such documents; except as to any portion of any future annual or quarterly report to stockholders or document or current report furnished under current Items 2.02 or 7.01 of Form 8-K that is not deemed filed under such provisions. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Under no circumstances will any information filed under current Items 2.02 or 7.01 of Form 8-K be deemed incorporated herein by reference unless such Form 8-K expressly provides to the contrary.

Item 6.Indemnification of Directors and Officers.

Under Section 145 of the Delaware General Corporation Law (the "DGCL"), a corporation has the power to indemnify its directors and officers under certain prescribed circumstances and, subject to certain limitations, against certain costs and expenses, including attorneys' fees, judgments, fines and amounts paid in settlement, actually and reasonably incurred in connection with any threatened, pending or completed action, suit or proceeding, whether criminal, civil, administrative or investigative, to which any of them is a party by reason of his being a director or officer of the corporation if it is determined that he acted in accordance with the applicable standard of conduct set forth in such statutory provision. In addition, a corporation may advance expenses incurred by a director or officer in defending a proceeding upon receipt of an undertaking from such person to repay any amount so advanced if it is ultimately determined that such person is not eligible for indemnification. Our amended and restated certificate of incorporation provides that, pursuant to the DGCL, our directors shall not be liable for monetary damages to the fullest extent authorized under applicable law, including for breach of the directors' fiduciary duty of care to us and our stockholders. This provision in our amended and restated certificate of incorporation does not eliminate the duty of care, and in appropriate circumstances equitable remedies such as injunctive



or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty, for acts or omissions not in good faith or involving intentional misconduct or knowing violations of the law, for actions leading to improper personal benefit to the director, and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws.

Article 10 of our amended and restated bylaws provides that we will indemnify, to the fullest extent authorized by the DGCL, each person who was or is made a party or is threatened to be made a party to or is involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she is or was a director or officer of our company, whether the basis of such proceeding is alleged action in an official capacity as a director or officer or in any other capacity while serving as a director or officer against all expenses, liability and loss reasonably incurred or suffered by such person in connection therewith.

In addition to the above, we have entered into indemnification agreements with each of our directors and officers. These indemnification agreements provide our directors and officers with the same indemnification and advancement of expenses as described above, and provide that our directors and officers will be indemnified to the fullest extent authorized by any future Delaware law that expands the permissible scope of indemnification. We also have directors' and officers' liability insurance, which provides coverage against certain liabilities that may be incurred by our directors and officers in their capacities as directors and officers of the Company.

Draviously Filed

Item 8.Exhibits.

	Previously Filed					
Exhibit						Filed
Number	Description	Form	File No.	Filing Date	Exhibit	Herewith
4.1	Amended and Restated Certificate of Incorporation of Gevo, Inc.	10-K	001-35073	March 29, 2011	3.1	
4.2	Certificate of Amendment to the Amended and Restated	8-K	333-168792	June 10, 2013	3.1	ľ
	Certificate of Incorporation of Gevo, Inc.					
4.3	Certificate of Amendment to Amended and Restated Certificate	8-K	001-35073	July 9, 2014	3.1	
	of Incorporation of Gevo, Inc.					
4.4	Amended and Restated Bylaws of Gevo, Inc.	10-K	001-35073	March 29, 2011	3.2	
4.5	Gevo, Inc. Amended and Restated 2010 Stock Incentive Plan.	8-K	001-35073	July 10, 2015	10.1	
4.6	Form of Restricted Stock Unit Agreement under the 2010 Stock	S-1/A	333-168792	January 19, 2011	10.15	
	Incentive Plan.					ļ
4.7	Form of Restricted Stock Award Agreement under the 2010	10-K	001-35073	March 29, 2011	10.21	
	Stock Incentive Plan.					ļ
4.8	Form of Stock Option Award Agreement under the 2010 Stock	10-K	001-35073	March 29, 2011	10.22	
	Incentive Plan.					ļ
5.1	Opinion of Paul Hastings LLP.					Х
23.1	Consent of Deloitte & Touche, LLP.					Х
23.2	Consent of Paul Hastings LLP (included in opinion of counsel					l
	filed as Exhibit 5.1).					l
24.1	Power of Attorney (included on the signature page to this					l
	Registration Statement).					
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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Englewood, State of Colorado, on this 28th day of September, 2015.

GEVO, INC.

By: /s/ PATRICK R. GRUBER

Patrick R. Gruber, Ph.D. Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints, jointly and severally, Patrick R. Gruber and Mike Willis his or her attorneys-in-fact, each with the power of substitution, for him or her in any and all capacities, to sign any amendments (including post-effective amendments) to this Registration Statement on Form S-8 (or any other registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) of the Securities Act), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement on Form S-8 has been signed by the following persons in the capacities and on the dates indicated.

Signatures	Title	Date	
/s/ PATRICK R. GRUBER Patrick R. Gruber, Ph.D.	Chief Executive Officer (Principal Executive Officer) and Director	September 28, 2015	
/s/ MIKE WILLIS Mike Willis	Chief Financial Officer (Principal Financial and Accounting Officer)	September 28, 2015	
/s/ RUTH DREESSEN Ruth Dreessen	Chairman of the Board of Directors	September 28, 2015	
/s/ GARY W. MIZE Gary W. Mize	Director	September 28, 2015	
/s/ ANDY MARSH Andy Marsh	Director	September 28, 2015	
/s/ JOHANNES MINHO ROTH Johannes Minho Roth	Director	September 28, 2015	

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EXHIBIT INDEX

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- 24.1

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September 28, 2015

Gevo, Inc. 345 Inverness Drive South Building C, Suite 310 Englewood, CO 80112

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to Gevo, Inc., a Delaware corporation (the "<u>Company</u>"), in connection with the preparation of the Registration Statement on Form S-8 to be filed by the Company with the U.S. Securities and Exchange Commission (the "<u>Commission</u>") on or about the date hereof (the "<u>Registration Statement</u>") to effect registration under the Securities Act of 1933, as amended (the "<u>Securities Act</u>"), of 1,000,000 shares (the "<u>Shares</u>") of the Company's common stock, \$0.01 par value per share ("<u>Common Stock</u>"), issuable pursuant to awards to be granted by the Company pursuant to the Company's Amended and Restated 2010 Stock Incentive Plan, as amended (the "<u>2010 Plan</u>").

As such counsel and for purposes of our opinion set forth herein, we have examined and relied upon originals or copies, certified or otherwise identified to our satisfaction, of such documents, resolutions, certificates and instruments of the Company, certificates of public officials and such other instruments and documents as we have deemed necessary or appropriate as a basis for the opinion set forth herein, including, without limitation:

- (i) the Registration Statement;
- (ii) the Company's Amended and Restated Certificate of Incorporation, as amended, certified by the Secretary of State of the State of Delaware;
- (iii) the Company's Amended and Restated Bylaws as presently in effect, certified by an officer of the Company as of September 28, 2015;
- (iv) the minutes of a meeting of the Board of Directors of the Company held on March 23, 2015 evidencing the approval by the Board of an amendment to the 2010 Plan to increase the number of shares of Common Stock authorized for issuance thereunder by 1,000,000 shares;
- (v) the Current Report on Form 8-K filed by the Company with the Commission on July 10, 2015 disclosing the final voting results of the 2015 annual meeting of the stockholders of the Company, evidencing the approval by the stockholders of an amendment to the 2010 Plan to increase the number of shares of Common Stock authorized for issuance thereunder by 1,000,000 shares;
- (vi) the 2010 Plan, including the forms of award agreements related thereto; and
- (vii) a certificate, dated as of September 28, 2015, from the Secretary of State of the State of Delaware as to the existence and good standing of the Company under the laws of the State of Delaware.

In addition to the foregoing, we have made such investigations of law as we have deemed necessary or appropriate as a basis for the opinion set forth herein.

In such examination and in rendering the opinion set forth herein, we have assumed, without independent investigation or verification: (i) the genuineness of all signatures on all agreements, instruments, corporate records, certificates and other documents submitted to us; (ii) the authenticity and

completeness of all agreements, instruments, corporate records, certificates and other documents submitted to us as originals; (iii) that all agreements, instruments, corporate records, certificates and other documents submitted to us as certified, electronic, facsimile, conformed, photostatic or other copies conform to the originals thereof, and that such originals are authentic and complete; (iv) the legal capacity and authority of all persons or entities executing all agreements, instruments, corporate records, certificates and other documents submitted to us; (v) the due authorization, execution and delivery of all agreements, instruments, corporate records, certificates and other documents by all parties thereto; (vi) that no documents submitted to us have been amended or terminated orally or in writing except as has been disclosed to us in writing; (vii) that the statements contained in the certificates and comparable documents of public officials, officers and representatives of the Company and other persons on which we have relied for the purposes of this opinion letter are true and correct; and (viii) that each of the officers and directors of the Company has properly exercised his or her fiduciary duties. As to all questions of fact material to the opinion set forth herein and as to the materiality of any fact or other matter referred to herein, we have relied (without independent investigation) upon representations and certificates or comparable documents of officers and representatives of the Company.

Based upon the foregoing, and in reliance thereon, and subject to the limitations, qualifications and exceptions set forth herein, we are of the opinion that the Shares are duly authorized and, when issued and sold as described in the Registration Statement and in accordance with the terms of the 2010 Plan and the applicable award agreements thereunder (including the receipt by the Company of the full consideration therefor), will be validly issued, fully paid and nonassessable.

Without limiting any of the other limitations, exceptions and qualifications stated elsewhere herein, we express no opinion with regard to the applicability or effect of the laws of any jurisdiction other than, as in effect on the date of this opinion letter, the Delaware General Corporation Law.

This opinion letter deals only with the specified legal issues expressly addressed herein, and you should not infer any opinion that is not explicitly addressed herein from any matter addressed in this opinion letter.

This opinion letter is rendered solely to you in connection with the issuance and delivery of the Shares and may be relied upon by you solely for such purpose. This opinion letter is rendered to you as of the date hereof, and we assume no obligation to advise you or any other person with regard to any change after the date hereof in the circumstances or the law that may bear on the matters set forth herein even if the change may affect the legal analysis, legal conclusion or other matters in this opinion letter.

We consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement. In giving such consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules or regulations of the Commission thereunder.

Very truly yours,

/s/ Paul Hastings LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 27, 2015, relating to the consolidated financial statements of Gevo, Inc. and subsidiaries, (which report expresses an unqualified opinion on the consolidated financial statements and includes explanatory paragraphs referring to Gevo Inc.'s going concern uncertainty and development activities) appearing in the Amended Annual Report on Form 10-K/A of Gevo, Inc. for the year ended December 31, 2014, which is incorporated by reference in this Registration Statement.

/s/ DELOITTE & TOUCHE LLP

Denver, Colorado September 28, 2015