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

FORM S-8 REGISTRATION STATEMENT UNDER

THE SECURITIES ACT OF 1933

AquaBounty Technologies, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

2 Mill & Main Place, Suite 395, Maynard, Massachusetts (Address of Principal Executive Offices) 04-3156167 (I.R.S. Employer Identification No.)

> 01754 (Zip Code)

AquaBounty Technologies, Inc. 2016 Equity Incentive Plan (Full Title of the Plan)

> David A. Frank Chief Financial Officer AquaBounty Technologies, Inc. 2 Mill & Main Place, Suite 395 Maynard, Massachusetts 01754 (Name and address of agent for service)

(978) 648-6000 (Telephone number, including area code, of agent for service)

Copies to:

Jocelyn M. Arel, Esq. Michael J. Minahan, Esq. Aaron Berman, Esq. Goodwin Procter LLP 100 Northern Avenue Boston, Massachusetts 02210 Telephone: (617) 570-1000

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

Large accelerated filer □ Non-accelerated filer ☑

Accelerated filer□Smaller reporting company☑Emerging growth company□

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

EXPLANATORY NOTE

This Registration Statement on Form S-8 is filed to register an additional 2,400,000 shares of common stock, \$0.001 par value per share ("Common Stock"), of AquaBounty Technologies, Inc. ("Registrant"), under the Registrant's 2016 Equity Incentive Plan, as amended (the "2016 Plan"). On May 25, 2023, pursuant to an amendment to the 2016 Plan, the number of shares of Common Stock reserved and available for issuance under the 2016 Plan increased by 2,400,000 shares. This Registration Statement registers these additional 2,400,000 shares of Common Stock.

The additional shares are of the same class as the other securities relating to the 2016 Plan for which the Registrant's registration statement on Form S-8 (File No 333-217321), filed on April 14, 2017, is effective. The information contained in the Registrant's registration statement on Form S-8 (File No. 333-217321) is hereby incorporated by reference pursuant to General Instruction E except to the extent supplemented, amended or superseded by the information set forth herein.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

The following documents are filed as exhibits to or incorporated by reference in this Registration Statement:

Exhibit Number	Description						
4.1*	.1* Third Amended and Restated Certificate of Incorporation of AquaBounty Technologies, Inc. (incorporated by reference to Exhibit in the Registrant's Registration Statement on Form 10, filed on November 7, 2016).						
4.2*	Certificate of Amendment of Third Amended and Restated Certificate of Incorporation of AquaBounty Technologies, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed on January 6, 2017).						
4.3*	Certificate of Amendment of Third Amended and Restated Certificate of Incorporation of AquaBounty Technologies, Inc. (incorporated by reference to Exhibit 3.3 to the Registrant's Registration Statement on Form S-1, filed on January 15, 2020).						
4.4*	Certificate of Amendment of Third Amended and Restated Certificate of Incorporation of AquaBounty Technologies, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed on November 19, 2020).						
4.5*	Certificate of Amendment of Third Amended and Restated Certificate of Incorporation of AquaBounty Technologies, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed on May 27, 2022).						
4.6*	AquaBounty Technologies, Inc. 2016 Equity Incentive Plan (incorporated by reference to Exhibit 10.6 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).						
4.7*	Amendment No. 1 to AquaBounty Technologies, Inc. 2016 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K, filed on May 2, 2019).						
4.8*	Amendment No. 2 to AquaBounty Technologies, Inc. 2016 Equity Incentive Plan (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K, filed on April 29, 2020).						
4.9*	Amendment No. 3 to AquaBounty Technologies, Inc. 2016 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed on May 26, 2023).						
5.1	Opinion of Goodwin Procter LLP.						
23.1	Consent of Deloitte & Touche LLP.						
23.2	Consent of Goodwin Procter LLP (included in Exhibit 5.1).						
24.1	Power of Attorney (included on the signature page of this Form S-8).						
107	Filing Fee Table.						

* Incorporated herein by reference as indicated.

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 Maynard, Commonwealth of Massachusetts, on June 6, 2023.

AQUABOUNTY TECHNOLOGIES, INC.

By: /s/ Sylvia Wulf

Sylvia Wulf Chief Executive Officer, President and Board Chair

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the date indicated. In addition, each person whose signature appears below constitutes and appoints David A. Frank and Angela M. Olsen, and each of them singly, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place, and stead, in any and all capacities, to (1) sign any and all amendments (including post-effective amendments) to this registration statement and any and all additional registration statements pursuant to Rule 462(b) of the Securities Act and (2) file the same, with all exhibits thereto, and all other documents in connection therewith, with the SEC, granting unto each such attorney-in-fact and agent full power and authority to do and perform each and every act in person, and hereby ratifying and confirming all that such attorney-in-fact and agent or his or her substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Signature	Title	Date
/s/ Sylvia Wulf Sylvia Wulf	Chief Executive Officer, President and Board Chair (Principal Executive Officer)	June 6, 2023
/s/ David A. Frank David A. Frank	Chief Financial Officer and Treasurer (Principal Financial Officer and Principal Accounting Officer)	June 6, 2023
/s/ Ricardo Alvarez Ricardo Alvarez	_ Director	June 6, 2023
/s/ Erin Sharp	Director	June 6, 2023
Erin Sharp /s/ Gail Sharps Myers	Director	June 6, 2023
Gail Sharps Myers /s/ Christine St.Clare	Director	June 6, 2023
Christine St.Clare	-	Lune (, 2022)
/s/ Rick Sterling Rick Sterling	Director	June 6, 2023
/s/ Michael Stern Michael Stern	Director	June 6, 2023



Goodwin Procter LLP 100 Northern Avenue Boston, MA 02210

goodwinlaw.com +1 617 570 1000

June 6, 2023

AquaBounty Technologies, Inc. Two Mill & Main Place, Suite 395 Maynard, Massachusetts 01754

Re: Securities Being Registered under Registration Statement on Form S-8

We have acted as counsel to you in connection with your filing of a Registration Statement on Form S-8 (the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), on or about the date hereof relating to an aggregate of 2,400,000 shares (the "Shares") of Common Stock, \$0.001 par value per share ("Common Stock"), of AquaBounty Technologies, Inc., a Delaware corporation (the "Company"), that may be issued pursuant to the Company's 2016 Equity Incentive Plan, as amended (the "Plan").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinions set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinion set forth below, on certificates of officers of the Company.

The opinion set forth below is limited to the Delaware General Corporation Law.

For purposes of the opinion set forth below, we have assumed that no event occurs that causes the number of authorized shares of Common Stock available for issuance by the Company to be less than the number of then unissued Shares.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, upon issuance and delivery against payment therefor in accordance with the terms of the Plan, will be validly issued, fully paid and nonassessable.

This opinion letter and the opinion it contains shall be interpreted in accordance with the Core Opinion Principles as published in 74 *Business Lawyer* 815 (Summer 2019).

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours, /s/ Goodwin Procter LLP

GOODWIN PROCTER 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 7, 2023 relating to the financial statements of AquaBounty Technologies, Inc., appearing in the Annual Report on Form 10-K of AquaBounty Technologies, Inc. for the year ended December 31, 2022.

/s/ Deloitte & Touche LLP

Baltimore, Maryland June 6, 2023

Calculation of Filing Fee Table

<u>Form S-8</u> (Form Type)

<u>AquaBounty Technologies, Inc.</u> (Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered (1)	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee(4)
Equity	2016 Equity	Rule 457(c) and	2,400,000 (2)	\$0.44 (3)	\$1,056,000.00	\$0.00011020	\$116.38
	Incentive Plan	Rule 457(h)					
	Common Stock,						
	\$0.001 par value						
	per share						
	Total Offering Amounts				\$1,056,000.00		\$116.38
	Total F	Fee Offsets				—	
	Net	Fee Due				\$116.38	

(1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers any additional shares of common stock, \$0.001 par value per share ("Common Stock"), of AquaBounty Technologies, Inc. (the "Registrant") which become issuable under the Registrant's 2016 Equity Incentive Plan, as amended (the "2016 Plan"), by reason of any stock dividend, stock split, recapitalization or any other similar transaction effected without the receipt of consideration which results in an increase in the number of the Registrant's outstanding shares of Common Stock.

(2) Consists of 2,400,000 shares of Common Stock that may become issuable under the 2016 Plan pursuant to its terms.

(3) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act, and based on \$0.44, the average of the high and low sales prices of the Common Stock as reported on the Nasdaq Capital Market on June 2, 2023.

(4) Calculated pursuant to Section 6(b) of the Securities Act.