UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-1 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) 0273 (Primary Standard Industrial Classification Code Number) 04-3156167 (I.R.S. Employer Identification Number)

2 Mill & Main Place, Suite 395 Maynard, Massachusetts 01754 (978) 648-6000

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

David A. Frank Chief Financial Officer AquaBounty Technologies, Inc. 2 Mill & Main Place, Suite 395 Maynard, Massachusetts 01754 Telephone: (978) 648-6000

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Jocelyn M. Arel, Esq. Michael J. Minahan, Esq. Goodwin Procter LLP 100 Northern Avenue Boston, Massachusetts 02210 Telephone: (617) 570-1000 Christopher Martin General Counsel AquaBounty Technologies, Inc. 2 Mill & Main Place, Suite 395 Maynard, Massachusetts 01754 Telephone: (978) 648-6000 Robert F. Charron, Esq. Ellenoff Grossman & Schole LLP 1345 Avenue of the Americas New York, New York 10105 Telephone: (212) 370-1300

Approximate date of commencement of proposed sale to public: As soon as practicable after this Registration Statement is declared effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \boxtimes 333-221435

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933.

Emerging growth company $\ oxtimes$

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, 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.

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.

filer," "accelerated filer" and	d "smaller reporting company" in Rule 12b-2 of the Exchange Act.		
Large accelerated filer Non-accelerated filer	□☑ (Do not check if a smaller reporting company)	Accelerated filer Smaller reporting company	

This Post-Effective Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-221435) is filed pursuant to Rule 462(d) under the Securities Act of 1933, as amended (the "Securities Act"), solely to update Exhibit 5.1 to such Registration Statement. This Registration Statement shall become effective upon filing with the Commission in accordance with Rule 462(d) under the Securities Act.

PART II Information not required in this prospectus

EXHIBIT INDEX

Exhibit Number	Exhibit Description
1.1**	Form of Underwriting Agreement.
3.1*	Third Amended and Restated Certificate of Incorporation of AquaBounty Technologies, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
3.2*	Certificate of Amendment of Third Amended and Restated Bylaws of AquaBounty Technologies, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Registration Current Report on Form 8-K, filed on January 6, 2017).
3.3*	Amended and Restated Bylaws of AquaBounty Technologies, Inc. (incorporated by reference to Exhibit 3.2 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
4.1*	Specimen Certificate of Common Stock (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
4.2**	Form of Common Stock Purchase Warrant.
5.1	Opinion of Goodwin Procter LLP.
10.1*	Stock Purchase Agreement, by and between AquaBounty Technologies, Inc. and Intrexon Corporation, dated November 7, 2016 (incorporated by reference to Exhibit 10.1 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.2*†	AquaBounty Technologies, Inc. 2006 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.3*†	Amendment No. 1 to AquaBounty Technologies, Inc. 2006 Equity Incentive Plan (incorporated by reference to Exhibit 10.3 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.4*†	Form of Stock Option Agreement pursuant to AquaBounty Technologies, Inc. 2006 Equity Incentive Plan (incorporated by reference to Exhibit 10.4 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.5*†	Form of Restricted Stock Agreement pursuant to AquaBounty Technologies, Inc. 2006 Equity Incentive Plan (incorporated by reference to Exhibit 10.5 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.6*†	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).
10.7*†	Form of Stock Option Agreement pursuant to AquaBounty Technologies, Inc. 2016 Equity Incentive Plan (incorporated by reference to Exhibit 10.22 to the Registrant's Registration Statement on Form 10, filed on December 12, 2016).
10.8*†	Form of Restricted Stock Agreement pursuant to AquaBounty Technologies, Inc. 2016 Equity Incentive Plan (incorporated by reference to Exhibit 10.21 to the Registrant's Registration Statement on Form 10, filed on December 12, 2016).
10.9*	Relationship Agreement, by and between AquaBounty Technologies, Inc. and Intrexon Corporation, dated December 5, 2012 (incorporated by reference to Exhibit 10.7 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.10*	Exclusive Channel Collaboration Agreement, by and between AquaBounty Technologies, Inc. and Intrexon Corporation, dated February

14, 2013 (incorporated by reference to Exhibit 10.8 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).

Exhibit Number	Exhibit Description
10.11*	Subscription Agreement, by and between AquaBounty Technologies, Inc. and the investors listed therein, dated February 14, 2013 (incorporated by reference to Exhibit 10.9 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.12*	Subscription Agreement, by and between AquaBounty Technologies, Inc. and Intrexon Corporation, dated March 5, 2014 (incorporated by reference to Exhibit 10.10 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.13*	Subscription Agreement, by and between AquaBounty Technologies, Inc. and Intrexon Corporation, dated June 24, 2015 (incorporated by reference to Exhibit 10.11 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.14*	Promissory Note Purchase Agreement, by and between AquaBounty Technologies, Inc. and Intrexon Corporation, dated February 22, 2016 (incorporated by reference to Exhibit 10.12 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.15*	Lease and Management Agreement, by and between AquaBounty Panama, S. de R.L. and Luis Lamastus, dated October 1, 2013 (incorporated by reference to Exhibit 10.13 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.16*	Agreement, by and among Atlantic Canada Opportunities Agency and AQUA Bounty Canada Inc. and AquaBounty Technologies Inc., dated December 16, 2009 (incorporated by reference to Exhibit 10.14 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.17*†	Employment Agreement, by and between Ronald Stotish and AquaBounty Technologies, Inc., dated April 1, 2006 (incorporated by reference to Exhibit 10.15 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.18*†	Employment Agreement, by and between David Frank and AquaBounty Technologies, Inc., dated October 1, 2007 (incorporated by reference to Exhibit 10.16 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.19*†	Employment Agreement, by and between Alejandro Rojas and AquaBounty Technologies, Inc., dated December 30, 2013 (incorporated by reference to Exhibit 10.17 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.20*	Collaborative Research Agreement, by and between AQUA Bounty Canada Inc. and Tethys Aquaculture Canada, Inc., dated March 22, 2012 (incorporated by reference to Exhibit 10.18 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.21*	Intellectual Property License and Full and Final Release among Genesis Group Inc., HSC Research and Development Partnership and AquaBounty Technologies, Inc., dated February 28, 2014 (incorporated by reference to Exhibit 10.19 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.22*	Amended and Restated Lease Agreement, by and between AquaBounty Panama, S. de R.L. and Ligia Gabriela Surgeon de Lamastus, dated May 1, 2016 (incorporated by reference to Exhibit 10.20 to the Registrant's Registration Statement on Form 10, filed on November 7, 2016).
10.23*	Asset Purchase Agreement by and between AquaBounty Technologies, Inc. and Bell Fish Company LLC, dated as of June 9, 2017 (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q, filed on August 4, 2017).
21.1*	List of Subsidiaries of AquaBounty Technologies, Inc. (incorporated by reference to Exhibit 21.1 to the Registrant's Annual Report on Form 10-K, filed on March 16, 2017).

Exhibit Number	Exhibit Description		
23.1**	Consent of Wolf & Company, P.C.		
23.2	Consent of Goodwin Procter LLP (included in Exhibit 5.1)		
24.1*	Powers of attorney (included on the signature page of the original filing of this Registration Statement)		
101.INS**	XBRL Instance Document.		
101.SCH**	XBRL Taxonomy Extension Schema Document.		
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document.		
101.DEF**	XBRL Taxonomy Extension Definition.		
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document.		
101.PRE**	XBRL Taxonomy Presentation Linkbase Document.		
* Incorporated herein by reference as indicated.			

Management contract or compensatory plan or arrangement.

** Previously filed.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Post-Effective Amendment No. 1 to the Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Maynard, Commonwealth of Massachusetts, on the 16th day of January, 2018.

AQUABOUNTY TECHNOLOGIES, INC.

By: /s/ Ronald L. Stotish

Ronald L. Stotish

Chief Executive Officer, President, and Director

Pursuant to the requirements of the Securities Act, this Post-Effective Amendment No. 1 to the Registration Statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

Signature	<u>Title</u>	<u>Date</u>
/s/ Ronald L. Stotish Ronald L. Stotish	President, Chief Executive Officer and Director (Principal Executive Officer)	January 16, 2018
/s/ David A. Frank David A. Frank	Chief Financial Officer and Treasurer (Principal Financial Officer and Principal Accounting Officer)	January 16, 2018
* Richard J. Clothier	Chairman of the Board, Director	January 16, 2018
* Jack A. Bobo	Director	January 16, 2018
* Richard L. Huber	Director	January 16, 2018
* Christine St.Clare	Director	January 16, 2018
* Rick Sterling	Director	January 16, 2018
* James C. Turk	Director	January 16, 2018
*By: /s/ Ronald L. Stotish Ronald L. Stotish Attorney-in-fact		



Goodwin Procter LLP 100 Northern Avenue Boston, MA 02210 goodwinlaw.com +1 617 570 1000

January 16, 2018

AquaBounty Technologies, Inc. 2 Mill & Main Place, Suite 395 Maynard, MA 01754

Re: Securities Registered under Registration Statement on Form S-1

Ladies and Gentlemen:

We have acted as counsel to you in connection with your filing of a Registration Statement on Form S-1 (File No. 333-221435) (as amended or supplemented, the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration of the offering by AquaBounty Technologies, Inc., a Delaware corporation (the "Company") of up to 4,246,153 shares (the "Shares") of the Company's Common Stock, \$0.001 par value per share, including Shares purchasable by the underwriters upon their exercise of an over-allotment option granted to the underwriters by the Company, and (ii) warrants ("the Warrants") to purchase up to 4,246,153 shares of Common Stock, including Warrants purchasable by the underwriters upon their exercise of an over-allotment option granted to the underwriters by the Company, (the "Warrant Shares") covered by the Registration Statement. The Shares and Warrants are being sold to the several underwriters named in, and pursuant to, an underwriting agreement among the Company and H.C. Wainwright & Co., LLC, as representative for such underwriters (the "Underwriting Agreement").

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 opinions set forth below, on certificates of officers of the Company.

The opinion set forth below is limited to the Delaware General Corporation Law and New York law.

Based on the foregoing, we are of the opinion that:

- 1. The Shares have been duly authorized and, upon issuance and delivery against payment therefor in accordance with the terms of the Underwriting Agreement, will be validly issued, fully paid and non-assessable.
- 2. The Warrants have been duly authorized and, when issued, delivered and paid for in accordance with the Underwriting Agreement, will be valid and binding obligations of the Company.
- 3. Assuming a sufficient number of authorized but unissued shares of Common Stock are available for issuance when the Warrants are exercised, the Warrant Shares, when and if issued upon exercise of the Warrants in accordance with the terms of the Warrants, will be validly issued, fully paid and non-assessable.

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement and to the references to our firm under the caption "Legal Matters" in 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