UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-Q

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2020

or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from ____________________ to ____________________

Commission File Number: 001-36426

AquaBounty Technologies, Inc.

(Exact name of the registrant as specified in its charter)

Delaware	**04-3156167**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

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

(Address and telephone number of the registrant's principal executive offices)

Title of each class	Trading Symbol(s)	Name of exchange on which registered
Common Stock, par value $0.001 per share	**AQB**	**The NASDAQ Stock Market LLC**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or such shorter period that the registrant was required to submit such files).

Yes ☒ No ☐

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	☐	Accelerated filer	☐	Non-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 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☒

At November 2, 2020, the registrant had 44,960,806 shares of common stock, par value $0.001 per share ("Common Shares") outstanding.

AquaBounty Technologies, Inc.

FORM 10-Q

For the Quarterly Period Ended September 30, 2020

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Cautionary Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q, particularly the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," contains forward looking statements. All statements other than present and historical facts and conditions contained in this Quarterly Report on Form 10-Q, including statements regarding our future results of operations and financial positions, business strategy, plans, and our objectives for future operations, are forward-looking statements. When used in this Quarterly Report on Form 10-Q, the words "anticipate," "believe," "can," "could," "estimate," "expect," "intend," "is designed to," "may," "might," "plan," "potential," "predict," "objective," "should," or the negative of these and similar expressions identify forward-looking statements. These forward-looking statements include statements that are not historical facts, including statements regarding management's expectations for future financial and operational performance and operating expenditures, expected growth, and business outlook; the nature of and progress toward our commercialization plan; the future introduction of our products to consumers; the countries in which we may obtain regulatory approval and the progress toward such approvals; the volume of eggs or fish we may be able to produce; the timeline for our production of saleable fish; the expected advantages of land-based systems over sea cage production; the validity and impact of legal actions; the completion of renovations at our farms; and the establishment of a larger-scale grow-out facility.

We have based these forward-looking statements on our current expectations, assumptions, estimates, and projections. While we believe these expectations, assumptions, estimates, and projections are reasonable, such forward-looking statements are only predictions and involve known and unknown risks, uncertainties, and other factors, many of which are outside of our control, which could cause our actual results, performance, or achievements to differ materially from any results, performance, or achievements expressed or implied by such forward-looking statements. Forward-looking statements in this Quarterly Report on Form 10-Q include, but are not limited to, statements about:

- the anticipated benefits and characteristics of our AquAdvantage salmon product;
- the implementation and likelihood of achieving the business plan, future revenue, and operating results;
- our plans for and the cost and timing of the development of new farms and the output of those farms;
- developments concerning our research projects;
- our expectations regarding our ability to successfully enter new markets or develop additional products;
- our competitive position and developments and projections relating to our competitors and our industry;
- expectations regarding anticipated operating results;
- our cash position and ability to raise additional capital to finance our activities;
- the impact of the COVID-19 coronavirus outbreak (the "COVID-19 pandemic") on our business, operations, and financial results, any of which could be significantly impaired by the COVID-19 pandemic;
- our ability to protect our intellectual property and other proprietary rights and technologies;
- the impact of and our ability to adapt to changes in laws or regulations and policies;
- the ability to secure any necessary regulatory approvals to commercialize any products;
- the rate and degree of market acceptance of any products developed through the application of bioengineering, including bioengineered fish;
- our ability to retain and recruit key personnel;
- the success of any of our future acquisitions or investments;
- our expectations regarding the time during which we will be an emerging growth company under the JOBS Act; and
- our estimates regarding expenses, future revenue, capital requirements, and needs for additional financing.

We caution you that the foregoing list may not contain all of the risks to which the forward-looking statements made in this Quarterly Report on Form 10-Q are subject. We may not actually achieve the plans, intentions, or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions, and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included, particularly in the section titled "Risk Factors," that could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, or investments that we may make.

Given these risks and uncertainties, you are cautioned not to place undue reliance on such forward-looking statements. These forward-looking statements are made only as of the date of this Quarterly Report on Form 10-Q. We do not undertake and specifically decline any obligation to update any such statements or to publicly announce the results of any revisions to any such statements to reflect future events or developments unless required by federal securities law. New risks emerge from time to time, and it is not possible for us to predict all such risks.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

AquaBounty Technologies, Inc.

Consolidated Balance Sheets

(Unaudited)

	As of	
	September 30, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	**$ 38,989,366**	$ 2,798,744
Other receivables	**62,034**	55,198
Inventory	**2,869,470**	1,232,049
Prepaid expenses and other current assets	**820,193**	391,162
Total current assets	**42,741,063**	4,477,153
Property, plant and equipment, net	**25,699,143**	25,065,836
Right of use assets, net	**356,788**	399,477
Definite-lived intangible assets, net	**147,311**	157,588
Indefinite-lived intangible assets	**101,661**	101,661
Restricted cash	**500,000**	—
Other assets	**50,213**	32,024
Total assets	**$ 69,596,179**	$ 30,233,739
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable and accrued liabilities	**$ 2,116,877**	$ 1,462,809
Current lease liabilities and other	**62,627**	62,286
Current debt	**152,501**	163,155
Total current liabilities	**2,332,005**	1,688,250
Long-term lease obligations	**306,174**	352,808
Long-term debt, net	**8,425,552**	4,432,052
Total liabilities	**11,063,731**	6,473,110
Commitments and contingencies		
Stockholders' equity:		
Common stock, $0.001 par value, 50,000,000 shares authorized; 44,916,926 (2019: 21,635,365) shares outstanding	**44,917**	21,635
Additional paid-in capital	**201,402,983**	156,241,363
Accumulated other comprehensive loss	**(490,153)**	(360,160)
Accumulated deficit	**(142,425,299)**	(132,142,209)
Total stockholders' equity	**58,532,448**	23,760,629
Total liabilities and stockholders' equity	**$ 69,596,179**	$ 30,233,739

See accompanying notes to these unaudited interim consolidated financial statements.

AquaBounty Technologies, Inc.

Consolidated Statements of Operations and Comprehensive Loss

(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	**2020**	2019
Revenues				
Product revenues	**$ 67,763**	$ —	**$ 77,466**	$ 140,371
Costs and expenses				
Production costs	**1,355,939**	846,306	**3,238,689**	2,649,674
Sales and marketing	**143,646**	206,256	**331,868**	381,637
Research and development	**458,462**	446,582	**1,662,879**	1,923,512
General and administrative	**1,722,874**	1,500,448	**5,053,608**	4,960,553
Total costs and expenses	**3,680,921**	2,999,592	**10,287,044**	9,915,376
Operating loss	**(3,613,158)**	(2,999,592)	**(10,209,578)**	(9,775,005)
Other income (expense)				
Interest expense	**(38,335)**	(17,933)	**(73,527)**	(45,483)
Other income (expense), net	**1,705**	(697)	**15**	11,603
Total other income (expense)	**(36,630)**	(18,630)	**(73,512)**	(33,880)
Net loss	**$ (3,649,788)**	$ (3,018,222)	**$ (10,283,090)**	$ (9,808,885)
Other comprehensive income (loss):				
Foreign currency translation gain (loss)	**86,491**	(38,892)	**(129,993)**	133,448
Total other comprehensive income (loss)	**86,491**	(38,892)	**(129,993)**	133,448
Comprehensive loss	**$ (3,563,297)**	$ (3,057,114)	**$ (10,413,083)**	$ (9,675,437)
Basic and diluted net loss per share	**$ (0.09)**	$ (0.14)	**$ (0.31)**	$ (0.50)
Weighted average number of Common Shares - basic and diluted	**38,911,054**	21,604,072	**32,756,074**	19,556,607

See accompanying notes to these unaudited interim consolidated financial statements.

AquaBounty Technologies, Inc.

Consolidated Statements of Changes in Stockholders' Equity

(Unaudited)

	Common stock issued and outstanding	Par value	Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Total
Balance at December 31, 2018	15,098,837	$ 15,099	$ 142,707,957	$ (574,186)	$ (118,914,567)	$ 23,234,303
Net loss					(2,763,932)	(2,763,932)
Other comprehensive income (loss)				87,552		87,552
Issuance of common stock, net	3,345,282	3345	6,606,310			6,609,655
Exercise of warrants	76,797	77	250,347			250,424
Share based compensation	176,561	176	138,322			138,498
Balance at March 31, 2019	18,697,477	$ 18,697	$ 149,702,936	$ (486,634)	$ (121,678,499)	$ 27,556,500
Net loss					(4,026,731)	(4,026,731)
Other comprehensive income (loss)				84,788		84,788
Issuance of common stock, net	2,901,078	2901	5,782,792			5,785,693
Share based compensation			318,218			318,218
Balance at June 30, 2019	21,598,555	$ 21,598	$ 155,803,946	$ (401,846)	$ (125,705,230)	$ 29,718,468
Net loss					$ (3,018,222)	$ (3,018,222)
Other comprehensive income (loss)				$ (38,892)		$ (38,892)
Exercise of warrants for common stock	6,767	$ 7	$ 21,986			$ 21,993
Share based compensation			$ 196,736			$ 196,736
Balance at September 30, 2019	21,605,322	$ 21,605	$ 156,022,668	$ (440,738)	$ (128,723,452)	$ 26,880,083

	Common stock issued and outstanding	Par value	Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Total
Balance at December 31, 2019	**21,635,365**	**$ 21,635**	**$ 156,241,363**	**$ (360,160)**	**$ (132,142,209)**	**$ 23,760,629**
Net loss					**(3,109,618)**	**(3,109,618)**
Other comprehensive income (loss)				**(381,985)**		**(381,985)**
Issuance of common stock, net	**10,350,000**	**10,350**	**14,511,354**			**14,521,704**
Share based compensation	**100,319**	**101**	**205,252**			**205,353**
Balance at March 31, 2020	**32,085,684**	**$ 32,086**	**$ 170,957,969**	**$ (742,145)**	**$ (135,251,827)**	**$ 34,996,083**
Net loss					**(3,523,684)**	**(3,523,684)**
Other comprehensive income (loss)				**165,501**		**165,501**
Issuance of common stock, net	**20,000**	**20**	**40,580**			**40,600**
Share based compensation			**103,891**			**103,891**
Balance at June 30, 2020	**32,105,684**	**$ 32,106**	**$ 171,102,440**	**$ (576,644)**	**$ (138,775,511)**	**$ 31,782,391**
Net loss					**$ (3,649,788)**	**$ (3,649,788)**
Other comprehensive income (loss)				**$ 86,491**		**$ 86,491**
Issuance of common stock, net of expenses	**12,650,000**	**$ 12,650**	**$ 29,701,947**			**$ 29,714,597**
Exercise of warrants for common stock	**161,242**	**$ 161**	**$ 523,876**			**$ 524,037**
Share based compensation			**$ 74,720**			**$ 74,720**
Balance at September 30, 2020	**44,916,926**	**$ 44,917**	**$ 201,402,983**	**$ (490,153)**	**$ (142,425,299)**	**$ 58,532,448**

See accompanying notes to these unaudited interim consolidated financial statements.

AquaBounty Technologies, Inc.

Consolidated Statements of Cash Flows

(Unaudited)

	Nine Months Ended September 30,	
	2020	2019
Operating activities		
Net loss	**$ (10,283,090)**	$ (9,808,885)
Adjustment to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	**1,082,261**	928,476
Share-based compensation	**383,964**	653,452
Gain on disposal of equipment	**(1,816)**	(8,548)
Other non-cash charges	**41,967**	—
Changes in operating assets and liabilities:		
Other receivables	**(8,252)**	45,880
Inventory	**(1,638,981)**	(400,716)
Prepaid expenses and other assets	**(527,913)**	(43,404)
Accounts payable and accrued liabilities	**366,403**	345,569
Net cash used in operating activities	**(10,585,457)**	(8,288,176)
Investing activities		
Purchase of property, plant and equipment	**(2,640,039)**	(1,824,831)
Proceeds from sale of equipment	**99,816**	8,548
Proceeds from legal settlement, net	**1,014,008**	—
Other investing activities	**(18,900)**	12
Net cash used in investing activities	**(1,545,115)**	(1,816,271)
Financing activities		
Proceeds from issuance of debt	**4,221,130**	900,767
Payment of debt issuance costs	**(91,620)**	—
Repayment of term debt	**(49,862)**	(57,001)
Proceeds from the issuance of common stock, net	**44,236,301**	12,395,348
Proceeds from the exercise of stock options and warrants, net	**524,037**	272,416
Net cash provided by financing activities	**48,839,986**	13,511,530
Effect of exchange rate changes on cash	**(18,792)**	15,993
Net change in cash, cash equivalents and restricted cash	**36,690,622**	3,423,076
Cash, cash equivalents and restricted cash at beginning of period	**2,798,744**	3,002,557
Cash, cash equivalents and restricted cash at the end of period	**$ 39,489,366**	$ 6,425,633
Supplemental disclosure of cash flow information and non-cash transactions:		
Interest paid in cash	**$ 47,275**	$ 45,483
Property and equipment included in accounts payable and accrued liabilities	**$ 517,344**	$ 119,541

See accompanying notes to these unaudited interim consolidated financial statements.

AquaBounty Technologies, Inc.
Notes to the consolidated financial statements
For the nine months ended September 30, 2020 and 2019 (unaudited)

1. Nature of business and organization

AquaBounty Technologies, Inc. (the “Parent” and, together with its subsidiaries, the “Company”) was incorporated in December 1991 in the State of Delaware for the purpose of conducting research and development of the commercial viability of a group of proteins commonly known as antifreeze proteins. In 1996, the Parent obtained the exclusive licensing rights for a gene construct (transgene) used to create a breed of farm-raised Atlantic salmon that exhibit growth rates that are substantially faster than conventional salmon.

In 2015, the Parent obtained approval from the US Food and Drug Administration (the “FDA”) for the production, sale, and consumption of its AquAdvantage salmon product in the United States.

In 2016, the Parent obtained approval from Health Canada for the sale and consumption of its AquAdvantage salmon product in Canada. Previously, in 2013, the Parent obtained approval from Environment Canada for the production of the product.

AQUA Bounty Canada Inc. (the “Canadian Subsidiary”) was incorporated in January 1994 for the purpose of establishing a commercial biotechnology laboratory to conduct research and development programs related to the Parent’s technologies and to commercialize the Parent’s products in Canada.

AquaBounty Panama, S. de R.L. (the “Panama Subsidiary”) was incorporated in May 2008 in Panama for the purpose of conducting commercial trials of the Parent’s products. Operations at the site concluded in May 2019.

AquaBounty Farms, Inc. (the “U.S. Subsidiary”) was incorporated in December 2014 in the State of Delaware for the purpose of conducting field trials and commercializing the Parent’s products in the United States.

AquaBounty Farms Indiana LLC (the “Indiana Subsidiary”), which is wholly owned by the U.S. Subsidiary, was formed in June 2017 in the State of Delaware for the purpose of operating its aquaculture facility in Albany, Indiana.

AquaBounty Brasil Participações Ltda. (the “Brazil Subsidiary”) was incorporated in May 2015 for the purpose of conducting field trials and commercializing the Parent’s products in Brazil.

2. Basis of presentation

The unaudited interim consolidated financial statements include the accounts of AquaBounty Technologies, Inc. and its wholly owned direct subsidiaries, AQUA Bounty Canada Inc.; AquaBounty Panama, S. de R.L.; AquaBounty Farms, Inc.; AquaBounty Farms Indiana LLC; and AquaBounty Brasil Participações Ltda. The entities are collectively referred to herein as the “Company.” All intercompany transactions and balances have been eliminated upon consolidation.

The unaudited interim consolidated financial statements have been prepared in conformity with generally accepted accounting principles in the United States (“GAAP”) consistent with those applied in, and should be read in conjunction with, the Company’s audited financial statements and related footnotes for the year ended December 31, 2019. The unaudited interim consolidated financial statements reflect all adjustments, consisting only of normal recurring adjustments, which are, in the opinion of management, necessary for a fair presentation of the Company’s financial position as of September 30, 2020, and its results of operations and cash flows for the interim periods presented and are not necessarily indicative of results for subsequent interim periods or for the full year. The unaudited interim consolidated financial statements do not include all of the information and footnotes required by GAAP for complete financial statements, as allowed by the relevant SEC rules and regulations; however, the Company believes that its disclosures are adequate to ensure that the information presented is not misleading.

Certain balances in the 2019 financial statements have been reclassified to conform with the presentation of the 2020 unaudited interim consolidated financial statements.

Liquidity Matters

The Company has experienced net losses and negative cash flows from operations since its inception and has cumulative losses attributable to common stockholders of $142.4 million as of September 30, 2020. At September 30, 2020, the Company’s cash balance totaled $39.5 million. Management has evaluated its cash resources in view of its planned spending for on-going operations, capital expenditures, and working capital and believes that its current cash balance, along with the expected revenues from its farms, will meet the Company’s cash requirements for at least the next twelve months from the filing date, taking into consideration the foreseeable financial impact of delays or other events associated with the COVID-19 pandemic. Management also has the discretion to reduce spending and delay capital projects if necessary, in order to preserve cash. Until such time, if ever, as the Company can generate positive operating cash flows, it may finance its cash needs through a combination of equity offerings, debt financings, government or other third-party funding, strategic alliances, and licensing arrangements. The current COVID-19 pandemic has introduced uncertainty into the financial markets and, as a result, future funding sources may be more difficult to obtain, if at all.

Inventories

Inventories are mainly comprised of feed, eggs, fish in process and packaging materials. Inventories are measured at the lower of cost or net realizable value ("NRV"), where NRV is defined as the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion and transportation.

Fish in process inventory is a biological asset that is measured based on the estimated biomass of fish on hand. The Company has established a standard procedure to estimate the biomass of fish on hand using counting and sampling techniques.

Revenue recognition

The Company records revenue on the sale of a product when all revenue recognition criteria are fulfilled, including identifying the contract with a customer; identifying the performance obligations in the contract; determining the transaction price; allocating the transaction price to the performance obligations in the contract; and recognizing revenue when (or as) the Company satisfies a performance obligation. The Company evaluates customer credit risk in order to conclude it is "probable" it will collect the amount of consideration due in exchange for the goods or services.

Net loss per share

Basic and diluted net loss per share available to common stockholders has been calculated by dividing net loss by the weighted average number of Common Shares outstanding during the period. Basic net loss is based solely on the number of Common Shares outstanding during the period. Fully diluted net loss per share includes the number of Common Shares potentially issuable upon the exercise of warrants and options with an exercise price less than the fair value of the Common Shares. Since the Company is reporting a net loss for all periods presented, all potential Common Shares are considered anti-dilutive and are excluded from the calculation of diluted net loss per share.

At September 30, 2020, the Company had 2,164,610 potentially dilutive securities outstanding, consisting of 1,501,062 warrants and 663,548 stock options.

Accounting Pronouncements

Management does not expect any recently issued, but not yet effective, accounting standards to have a material effect on its results of operations or financial condition.

3. Risks and uncertainties

In addition to the risks inherent in the Company's industry and its stage of commercialization, the impact of the COVID-19 pandemic introduces a novel risk that is difficult to assess or predict. To date, the Company's farm operations have not been adversely affected by the pandemic, although the Company has made modifications to its biosecurity procedures and its farm sites to adapt to local requirements and to provide a safe work environment.

The Company has experienced delays in capital projects due to the pandemic, including a delay in the completion of its processing facility at the Indiana farm. The delay in the completion of this project is expected to continue into the fourth quarter of 2020 and the Company is therefore utilizing third party alternatives for fish processing in the interim. The Company has also seen a reduction in the market price for Atlantic salmon due to the pandemic's impact on demand in the food service sector. This has had a negative impact on the Company's revenue and inventory value in the current quarter and is likely to continue for the near-term.

Concentration of credit risk

Financial instruments that potentially subject the Company to credit risk consist principally of cash, cash equivalents and restricted cash. This risk is minimized by the Company's policy of investing in financial instruments with short-term maturities issued by highly rated financial institutions. The Company's cash, cash equivalents and restricted cash balances may at times exceed insurance limitations. The Company holds cash balances in bank accounts located in Canada to fund its local operations. These amounts are subject to foreign currency exchange risk, which is mitigated by the Company's policy to limit the balances held in these accounts. Balances in Canadian bank accounts totaled $133 thousand at September 30, 2020.

4. Inventory

Major classifications of inventory are summarized as follows:

		September 30, 2020		December 31, 2019
Feed	**$**	**221,300**	$	251,778
Eggs and fry		**41,151**		55,887
Packaging		**3,105**		—
Fish in process		**2,603,914**		924,384
Total inventory	**$**	**2,869,470**	$	1,232,049

5. Property, plant and equipment

Major classifications of property, plant and equipment are summarized as follows:

		September 30, 2020		December 31, 2019
Land	**$**	**711,073**	$	718,586
Building and improvements		**13,717,243**		13,297,489
Construction in process		**2,257,913**		2,105,873
Equipment		**13,369,665**		12,275,619
Office furniture and equipment		**200,862**		201,813
Vehicles		**27,365**		28,097
Total property and equipment	**$**	**30,284,121**	$	28,627,477
Less accumulated depreciation and amortization		**(4,584,978)**		(3,561,641)
Property, plant and equipment, net	**$**	**25,699,143**	$	25,065,836

Included in construction in process is $1.9 million for construction related to the Rollo Bay farm site. An additional $185 thousand has been committed.

Included in construction in process is $407 thousand for construction related to the Indiana farm site. An additional $1.3 million has been committed.

In December 2019, the Company reclassified certain feed mill equipment at the Indiana farm as held for sale, a component of prepaid expenses and other current assets, and adjusted the carrying value to fair value less estimated selling costs. During the first quarter of 2020, the equipment was sold, resulting in proceeds of $98 thousand. No gain or loss was recognized upon the sale of the equipment.

In March 2020, the Company settled an outstanding legal claim against a third party resulting in net proceeds of $1.0 million. The proceeds received reduced the carrying value of the acquired equipment. Depreciation on these items has been recalculated prospectively over their remaining useful lives.

6. Accounts payable and accrued liabilities

Accounts payable and accrued liabilities include the following:

		September 30, 2020		December 31, 2019
Accounts payable	**$**	**983,709**	$	809,444
Accrued payroll including vacation		**414,228**		236,489
Accrued professional fees and contract services		**295,272**		346,349
Accrued construction costs		**277,268**		—
Accrued taxes and other		**146,400**		70,527
Accounts payable and accrued liabilities	**$**	**2,116,877**	$	1,462,809

7. Debt

The current material terms and conditions of debt outstanding are as follows:

Original loan amount	Interest rate	Monthly repayment	Maturity date	September 30, 2020	December 31, 2019
ACOA AIF grant (C$2,871,919)	0%	Royalties	-	**$ 2,148,770**	$ 2,206,208
ACOA term loan (C$337,000)	0%	C$3,120	June 2026	**172,774**	184,583
ACOA term loan (C$500,000)	0%	C$4,630	November 2028	**363,708**	384,100
Kubota Canada Ltd. (C$95,961)	0%	C$1,142	January 2025	**44,446**	53,533
Finance PEI term loan (C$2,717,093)	4%	C$16,313	November 2023	**1,938,608**	1,766,783
First Farmers Bank &Trust ($4,000,000)	5.375%	$56,832	October 2028	**4,000,000**	—
Total debt				**$ 8,668,306**	$ 4,595,207
less: debt issuance costs				**(90,253)**	—
less: current portion				**(152,501)**	(163,155)
Long-term debt				**$ 8,425,552**	$ 4,432,052

Estimated principal payments remaining on loan debt are as follows:

Year	AIF	ACOA	FPEI	Kubota	FFBT	Total
2020	$ —	$ 17,396	$ 17,982	$ 2,564	$ —	$ 37,942
2021	—	69,583	73,337	10,257	116,675	269,852
2022	—	69,583	76,325	10,257	482,306	638,471
2023	—	69,582	1,770,964	10,256	509,256	2,360,058
2024	—	69,582	—	10,257	537,276	617,115
Thereafter	2,148,770	240,756	—	855	2,354,487	4,744,868
Total	$ 2,148,770	$ 536,482	$ 1,938,608	$ 44,446	$ 4,000,000	$ 8,668,306

In response to the COVID-19 pandemic, the Company was informed by Atlantic Canada Opportunities Agency (ACOA) on March 19, 2020, that all payments to the Canadian government would be deferred for three months, commencing April 1, 2020. On June 15, 2020, the Company was informed that payments would be deferred an additional three months, recommencing October 1, 2020. On October 14, 2020, the Company was informed that payments would continue to be deferred until further notice. A revised loan amortization schedule has not yet been received from ACOA.

In 2018, the Canadian Subsidiary obtained a new loan from Finance PEI (FPEI) in the amount of C$2.0 million ($1.5 million). The loan has an interest rate of 4% and is collateralized by a mortgage executed by the Canadian Subsidiary, which conveys a first security interest in all of its current and acquired assets. On March 24, 2020, the Company was informed by FPEI that all payments would be deferred for three months due to the pandemic. On April 23, 2020, the Canadian Subsidiary received the final C$300 thousand ($221 thousand) of funds available under the loan. Payments on the loan recommenced on August 1, 2020.

On July 31, 2020, the Company's Indiana Subsidiary obtained a $4.0 million loan from First Farmers Bank and Trust. Net proceeds were $3.9 million after deducting $90 thousand in loan settlement costs. The loan bears interest at a rate of 5.375% for the first five years. On July 31, 2025 the interest rate resets to the then US Treasury 5-year maturities rate plus 5% and remains fixed at that rate through maturity on October 1, 2028. The note requires interest only payments for the first 13 months, followed by monthly principal and interest payments of approximately $57 thousand through maturity. Proceeds from the loan may be used for the purpose of performing equipment upgrades, purchasing equipment and other improvements to the Indiana farm. The Company must comply with certain financial and non-financial covenants. The loan is also subject to certain prepayment penalties and is secured by the assets of the Indiana subsidiary and a guarantee by the Parent. The loan agreement requires the Company to maintain a $500 thousand minimum cash balance with the bank throughout the loan term. This amount is reflected as restricted cash on the balance sheet.

The Company recognized interest expense of $73 thousand and $44 thousand for the nine months ended September 30, 2020 and 2019, respectively, on its interest-bearing debt.

8. Leases

Lease expense for the nine months ended September 30, 2020 and 2019, amounted to $60 thousand and $102 thousand, respectively. The weighted average remaining lease term of the Company's operating leases was 23 years as of September 30, 2020. Lease payments included in operating cash flows totaled $63 thousand and $122 thousand for the nine months ended September 30, 2020 and 2019, respectively.

The table below summarizes the Company's lease obligations and remaining payments at September 30, 2020:

				September 30, 2020		December 31, 2019	
	Lease Type	End Date	Remaining Years	Remaining Payments	Lease Liability	Remaining Payments	Lease Liability
Maynard Office Lease	Operating	Mar 2023	2.5	**$ 167,374**	**$ 147,541**	$ 215,556	$ 186,323
Indiana Auto Lease	Operating	Feb 2021	0.4	**2,368**	**2,034**	5,999	5,533
Indiana Well Lease	Operating	Dec 2048	28.3	**690,691**	**219,226**	702,341	223,238
Total leases				**$ 860,433**	**$ 368,801**	$ 923,896	$ 415,094
Less: current portion				**(84,220)**	**(62,627)**	(85,011)	(62,286)
Long-term leases				**$ 776,213**	**$ 306,174**	$ 838,885	$ 352,808

Remaining payments under leases are as follows at September 30, 2020:

Year	Office	Auto	Well	Total
2020	$ 16,456	$ 1,211	$ 3,883	$ 21,550
2021	66,416	1,157	15,998	83,571
2022	67,602	—	16,478	84,080
2023	16,900	—	16,972	33,872
2024	—	—	17,481	17,481
Thereafter	—	—	619,879	619,879
Total Lease Payments	$ 167,374	$ 2,368	$ 690,691	$ 860,433

9. Stockholders' equity

Recent issuances

On February 12, 2020, the Company completed a public offering of 10,350,000 Common Shares. Net proceeds to the Company were $14.5 million after deducting discounts, fees, and expenses. TS Biotechnology Holdings, which is managed by Third Security and is controlled by Randal J. Kirk, our largest shareholder, participated in this offering, purchasing 5,175,000 Common Shares for a total of approximately $7.8 million in gross proceeds.

On May 6, 2020, the Company issued 20,000 restricted common shares to a consultant. The Company recorded a charge of $41 thousand in conjunction with the share issuance.

On August 7, 2020, the Company completed a public offering of 11,000,000 Common Shares. Net proceeds to the Company were $25.8 million after deducting discounts, fees, and expenses. TS Biotechnology Holdings, which is managed by Third Security and is controlled by Randal J. Kirk, our largest shareholder, participated in this offering, purchasing 4,000,000 Common Shares for a total of approximately $10 million in gross proceeds.

On August 17, 2020, the Company issued 1,650,000 Common Shares in conjunction with the overallotment exercise by the underwriters in the August 7, 2020 offering. Net proceeds to the Company were $3.9 million after deducting discounts, fees, and expenses.

Warrants

The following table summarizes information about outstanding warrants at September 30, 2020:

	Number of warrant shares	Weighted average exercise price
Outstanding at December 31, 2019	1,662,304	$3.25
Exercised	(161,242)	3.25
Outstanding at September 30, 2020	1,501,062	$3.25
Exercisable at September 30, 2020	1,501,062	$3.25

During the nine months ended September 30, 2020, the Company issued 161,242 Common Shares at $3.25 per share in conjunction with the exercise of warrants, with total proceeds of $524 thousand.

Share-based compensation

At September 30, 2020, the Company has reserved 1,658,315 shares of common stock issuable upon the exercise of outstanding stock options and future issuances under its 2006 and 2016 Equity Incentive Plans.

Restricted stock

A summary of the Company's shares of restricted stock as of September 30, 2020, is as follows:

	Shares	Weighted average grant date fair value
Balance at December 31, 2019	39,900	$2.31
Granted	100,319	1.88
Vested	(61,894)	2.10
Balance at September 30, 2020	78,325	$1.92

During the nine months ended September 30, 2020 and 2019, the Company expensed $160 thousand and $279 thousand, respectively, related to the restricted stock awards. At September 30, 2020, the balance of unearned share-based compensation to be expensed in future periods related to the restricted stock awards is $121 thousand. The period over which the unearned share-based compensation is expected to be earned is approximately 2.5 years.

Stock options

The Company's option activity is summarized as follows:

	Number of options	Weighted average exercise price
Outstanding at December 31, 2019	573,925	$4.94
Issued	104,458	1.99
Expired	(14,835)	11.62
Outstanding at September 30, 2020	663,548	$4.33
Exercisable at September 30, 2020	587,738	$4.64

Unless otherwise indicated, options issued to employees, members of the Board of Directors, and non-employees are vested daily over one to three years and are exercisable for a term of ten years from the date of issuance.

The fair values of stock option grants to employees and members of the Board of Directors during 2020 were measured on the date of grant using Black-Scholes, with the following weighted average assumptions:

	May 2020	March 2020	January 2020
Expected volatility	104%	102%	101%
Risk free interest rate	0.31%	0.66%	1.67%
Expected dividend yield	0%	0%	0%
Expected life (in years)	5	5	5

The weighted average fair value of stock options granted during the nine months ended September 30, 2020, was $1.49.

The total intrinsic value of all options outstanding was $1.2 million and $1 thousand at September 30, 2020, and December 31, 2019, respectively. The total intrinsic value of exercisable options was $1 million at September 30, 2020, and $1 thousand at December 31, 2019, respectively.

The following table summarizes information about options outstanding and exercisable at September 30, 2020:

Weighted average exercise price of outstanding options	Number of options outstanding	Weighted average remaining estimated life (in years)	Number of options exercisable	Weighted average exercise price of outstanding and exercisable options
$1.88 - $2.50	531,519	8.5	455,709	
$3.30 - $6.90	37,139	1.8	37,139	
$7.50 - $10.80	21,303	3.6	21,303	
$14.20 - $23.40	73,587	5.6	73,587	
	663,548		587,738	$4.64

Total share-based compensation on stock options amounted to $224 thousand and $374 thousand for the nine months ended September 30, 2020 and 2019, respectively. At September 30, 2020, the balance of unearned share-based compensation to be expensed in future periods related to unvested share-based awards was $111 thousand. The period over which the unearned share-based compensation is expected to be earned is approximately 2.7 years.

10. Commitments and contingencies

The Company recognizes and discloses commitments when it enters into executed contractual obligations with other parties. The Company accrues contingent liabilities when it is probable that future expenditures will be made and such expenditures can be reasonably estimated.

See Note 5 for commitments related to our renovation and construction costs.

There have been no other material changes to the commitments and contingencies disclosed in our Annual Report on Form 10-K as of and for the year ended December 31, 2019.

11. Subsequent Events

Department of Fisheries and Oceans Loan

The Canadian Subsidiary has been approved for a loan from the Department of Fisheries and Oceans in Canada. The loan amount is for C$1.9 million ($1.4 million), the interest rate is 0% and monthly repayments of C$16,865 ($12,650) will commence in March 2023 for a term of 9.5 years. Proceeds will be used to complete construction on the Canadian Subsidiary's broodstock facility at its Rollo Bay site.

Special Shareholder Meeting

The Company has filed a preliminary Proxy Statement for a special Shareholder Meeting to seek approval for an increase in the number of authorized shares of common stock from 50 million to 80 million shares. The Special Shareholder Meeting is to be held on November 19, 2020.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following "Management's Discussion and Analysis of Financial Condition and Results of Operations" should be read in conjunction with the unaudited financial information and the notes thereto included in this Quarterly Report on Form 10-Q and our Annual Report on Form 10-K for the year ended December 31, 2019, which was filed on March 10, 2020.

Overview

We believe that we are a leader in the field of land-based aquaculture and the use of technology for improving its productivity and sustainability. Our lead product is the AquAdvantage salmon, which received FDA approval in 2015 as the first bioengineered animal available for sale for human consumption. We have commenced commercial activities with operations in the United States and Canada where we have received regulatory approval.

COVID-19

In March 2020, the World Health Organization declared the outbreak of a novel coronavirus, SARS-CoV-2, as a pandemic, which continues to spread throughout the United States and worldwide. Because infections of this virus and incidences of the disease it causes, COVID-19, have been reported throughout both the United States and Canada, certain national, provincial, state, and local governmental authorities have issued proclamations and directives aimed at minimizing the spread of the virus. Additional, more restrictive proclamations and directives may be issued in the future.

The ultimate impact of the COVID-19 pandemic on our operations is unknown and will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the duration of the COVID-19 pandemic, new information which may emerge concerning the severity of the COVID-19 pandemic, and any additional preventative and protective actions that governments, or we, may direct, which may result in an extended period of continued business disruption and reduced operations. Our current preventative and protective measures include, but are not limited to, segregating farm workers to specific locations, rotating shifts, and monitoring worker temperatures upon arrival at our facilities. To the extent possible, work-from-home is utilized for employees that do not have fish care responsibilities. Any resulting financial impact cannot be reasonably estimated at this time but may have a material adverse impact on our business, financial condition, and results of operations.

To date, our farm operations have not been adversely affected by the pandemic, although we have made modifications to biosecurity procedures and our farm sites to adapt to local requirements and to provide a safe work environment.

We have experienced delays in capital projects due to the pandemic, including a delay in the completion of the processing facility at the Indiana farm. The delay in the completion of this project is expected to continue into the fourth quarter of 2020 and we are therefore utilizing third party alternatives for fish processing in the interim. We have also seen a reduction in the market price for Atlantic salmon due to the pandemic's impact on demand in the food service sector. This has had a negative impact on our revenue and inventory value and is likely to continue for the near-term.

We remain focused on maintaining a strong balance sheet, liquidity, and financial flexibility and continue to monitor developments as we deal with the disruptions and uncertainties from a business and financial perspective relating to the COVID-19 pandemic. Management expects that all of its operations, across all of its geographies, will be impacted to some degree, but the significance of the impact of the COVID-19 pandemic on our business and the duration for which it may have an impact cannot be determined at this time.

Revenue

We currently generate product revenue through the sales of our conventional Atlantic salmon, salmon eggs, fry, and byproducts. We expect that our sales will be modest and infrequent in the near-term as we slowly build our sales and distribution supply chain for our Indiana and Rollo Bay farm sites and as we deal with the supply chain disruption from the COVID-19 pandemic.

In the future, we believe that our revenue will depend upon the number of countries in which we have received regulatory approval for the sale of our AquAdvantage salmon, the number and capacity of grow-out farms we have in operation, and the market acceptance we achieve.

Production Costs

Production costs include the labor and related costs to grow out our fish, including feed, oxygen, and other direct costs; an application of overhead; and the cost to process and ship our products to customers. A portion of production costs are absorbed into inventory as fish in process to the extent that these costs do not exceed the net realizable value of the fish in process. As our farms in Indiana and Rollo Bay ramp up their production activity, the costs that are not absorbed into inventory are classified as other production costs. As of September 30, 2020, we had forty-one employees engaged in production activities.

Sales and Marketing Expenses

Our sales and marketing expenses currently include consulting fees for market-related activities. As of September 30, 2020, we had no employees dedicated to sales and marketing.

Research and Development Expenses

As of September 30, 2020, we employed seventeen scientists and technicians at our facilities on Prince Edward Island to oversee our broodstock of AquAdvantage salmon, as well as the lines of fish we maintain for research and development purposes. We recognize research and development expenses as they are incurred. Our research and development expenses consist primarily of:

- salaries and related overhead expenses for personnel in research, development functions, and brood-stock husbandry;
- fees paid to contract research organizations and consultants who perform research for us;
- costs related to laboratory supplies used in our research and development efforts; and
- costs related to the operation of our field trials.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and related costs for employees in executive, corporate, and finance functions. Other significant general and administrative expenses include corporate governance and public company costs, regulatory compliance, rent and utilities, insurance, and legal service. We had thirteen employees in our general and administrative group at September 30, 2020.

Other Income (Expense)

Interest expense includes the interest on our outstanding loans and amortization of debt issuance costs. Other income (expense) includes bank charges, fees, interest income, and miscellaneous gains or losses on asset disposals.

Results of Operations

Comparison of the three months ended September 30, 2020, to the three months ended September 30, 2019.

The following table summarizes our results of operations for the three months ended September 30, 2020 and 2019, together with the changes in those items in dollars and as a percentage (all dollar amounts in thousands):

	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Dollar Change	% Change
	(unaudited)			
Product revenue	$ 68	$ —	$ 68	100 %
Operating expenses:				
Production costs	1,356	846	510	60 %
Sales and marketing	144	206	(62)	(30)%
Research and development	458	447	11	2 %
General and administrative	1,723	1,500	223	15 %
Operating loss	3,613	2,999	614	20 %
Total other (income) expense	37	19	18	95 %
Net loss	$ 3,650	$ 3,018	$ 632	21 %

Product Revenue

Product revenue for the three months ended September 30, 2020 consisted of conventional Atlantic salmon and eggs. There was no product revenue for the three months ended September 30, 2019. We expect our sales will be modest in the near-term as we build our customer base while dealing with the production and market disruption from the COVID-19 pandemic.

Production Costs

Production costs for the three months ended September 30, 2020, were up from the corresponding period in 2019, due to production cost increases related to increasing fish biomass at the Indiana and Rollo Bay farms as they continue their ramp-up.

Costs for the current period also include a $403 thousand charge to reduce the value of fish in process inventory at the Indiana farm to reflect the reduction in the Net Realizable Value due to a reduction in the market price and demand for conventional Atlantic salmon.

Sales and Marketing Expenses

Sales and marketing expenses for the three months ended September 30, 2020, were down from the corresponding period in 2019 due to a decrease in personnel, offset by an increase in charges related to the commencement of marketing activities for our salmon. We expect that our sales and marketing expenses will increase as we increase sales of our fish.

Research and Development Expenses

Research and development expenses for the three months ended September 30, 2020, were slightly up from the corresponding period in 2019 due to increased personnel costs, offset by a decrease in outside contract service fees. We expect that our research and development expenses will increase as we expand our broodstock capacity, commence new field trials, and continue to pursue regulatory approval for additional products and additional markets.

General and Administrative Expenses

General and administrative expenses for the three months ended September 30, 2020, were up from the corresponding period in 2019 due to an increase in personnel associated compensation, regulatory legal fees associated with the FDA legal challenge, and corporate costs, offset by decreases in travel and stock compensation charges. We expect that our general and administrative expenses will fluctuate based on our legal fees associated with the FDA legal challenge.

Total Other (Income) Expense

Total other (income) expense is comprised of interest on debt, bank charges, gain on disposal of equipment and interest income for the three months ended September 30, 2020, and interest on debt, bank charges, and interest income for the three months ended September 30, 2019.

Comparison of the nine months ended September 30, 2020, to the nine months ended September 30, 2019.

The following table summarizes our results of operations for the nine months ended September 30, 2020 and 2019, together with the changes in those items in dollars and as a percentage (all dollar amounts in thousands):

	Nine Months Ended September 30,		Dollar	%
	2020	2019	Change	Change
	(unaudited)			
Product revenue	$ 77	$ 140	$ (63)	(45)%
Operating expenses:				
Production costs	3,239	2,650	589	22 %
Sales and marketing	332	382	(50)	(13)%
Research and development	1,663	1,923	(260)	(14)%
General and administrative	5,053	4,960	93	2 %
Operating loss	10,210	9,775	435	4 %
Total other (income) expense	74	34	40	118 %
Net loss	$ 10,284	$ 9,809	$ 475	5 %

Product Revenue

Product revenue for the nine months ended September 30, 2020 consisted of conventional Atlantic salmon, fry and eggs. For the comparative period in 2019, revenue included the sale of AquAdvantage salmon from our Panama demonstration farm.

Production Costs

Production costs for the nine months ended September 30, 2020, were up from the corresponding period in 2019, due to production cost increases related to increasing fish biomass at the Indiana and Rollo Bay farms as they continue their ramp-up.

Costs for the current period also include a $719 thousand charge to reduce the value of the fish in process inventory at the Indiana farm to reflect the reduction in the Net Realizable Value due to a reduction in the market price and demand for Atlantic salmon due to the impact of COVID-19 on the food service industry.

Sales and Marketing Expenses

Sales and marketing expenses for the nine months ended September 30, 2020, were down from the corresponding period in 2019 due to a decrease in personnel cost, offset by an increase in charges related to the commencement of marketing activities for our salmon.

Research and Development Expenses

Research and development expenses for the nine months ended September 30, 2020, were down from the corresponding period in 2019 due to lower field trial costs, primarily related to the closing of our demonstration farm in Panama, and lower personnel costs, offset by an increase in outside contract service fees.

General and Administrative Expenses

General and administrative expenses for the nine months ended September 30, 2020, were up slightly from the corresponding period in 2019 due to an increase in personnel costs, regulatory legal fees associated with the FDA legal challenge, and outside consulting fees, offset by a decrease in travel and stock compensation charges.

Total Other (Income) Expense

Total other (income) expense is comprised of interest on debt, bank charges a gain on disposal of equipment and interest income for the nine months ended September 30, 2020, and interest on debt, bank charges, and interest income for the nine months ended September 30, 2019.

Cash Flows

The following table sets forth the significant sources and uses of cash for the periods set forth below (in thousands):

	Nine Months Ended September 30, 2020	2019
	(unaudited)	
Net cash provided by (used in):		
Operating activities	$ (10,585)	$ (8,288)
Investing activities	(1,545)	(1,816)
Financing activities	48,840	13,511
Effect of exchange rate changes on cash	(19)	16
Net increase (decrease) in cash	$ 36,691	$ 3,423

Cash Flows from Operating Activities

Net cash used in operating activities during the nine months ended September 30, 2020, was primarily comprised of our $10.3 million net loss, offset by non-cash depreciation and stock compensation charges of $1.5 million, and increased by working capital uses of $1.8 million. Net cash used in operating activities during the nine months ended September 30, 2019, was primarily comprised of our $9.8 million net loss, offset by non-cash depreciation and stock compensation charges of $1.6 million, and increased by working capital uses of $61 thousand.

Spending on operations increased due to increases in production activities at our Rollo Bay and Indiana farm sites, offset by lower field trial costs related to our demonstration farm in Panama and travel. Cash used by working capital increased in the current period and was due primarily to an increase in inventory and prepaid expenses, offset by an increase in accounts payable and accrued liabilities.

Cash Flows from Investing Activities

During the nine months ended September 30, 2020, we used $2.6 million for renovations to our Indiana farm site and for construction charges at our Rollo Bay site, offset by $100 thousand in proceeds from the sale of equipment and $1 million in net proceeds from a legal settlement. During the same period in 2019, we used $1.8 million for renovations to our Indiana farm site and for construction charges at our Rollo Bay site, offset by $9 thousand in proceeds from the sale of equipment.

Cash Flows from Financing Activities

During the nine months ended September 30, 2020, we received approximately $44 million in net proceeds from the issuance of Common Shares in two public offerings, $524 thousand from the exercise of warrants, and $4.2 million from new debt. This was offset by $50 thousand in the repayment of debt. During the same period in 2019, we received approximately $12.4 million in net proceeds from the issuance of Common Shares in a public offering, $272 thousand from the exercise of warrants, and $901 thousand from new debt. This was offset by $57 thousand in the repayment of debt.

Future Capital Requirements

As discussed in Note 2 to the financial statements, the Company has experienced net losses and negative cash flows from operations since its inception and has cumulative losses attributable to common stockholders of $142.4 million and a cash balance of $39.5 million as of September 30, 2020. Management believes its current cash balance, along with the expected revenues from its farms will meet the Company's cash requirements for at least the next twelve months from the filing date. Management also has the discretion to reduce spending and delay capital projects if necessary, in order to preserve cash.

Until such time, if ever, as we can generate positive operating cash flows, we may finance our cash needs through a combination of equity offerings, debt financings, government or other third-party funding, strategic alliances, and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of holders of our common stock will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of holders of our common stock. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, or declaring dividends. If we raise additional funds through government or other third-party funding; marketing and distribution arrangements; or other collaborations, strategic alliances, or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs, or product candidates or to grant licenses on terms that may not be favorable to us.

The current COVID-19 pandemic has introduced uncertainty and volatility into the financial markets and as a result sources of future funding may be more difficult to obtain, if at all.

If we are unable to generate additional funds in the future through financings, sales of our products, government grants, loans, or from other sources or transactions, we will exhaust our resources and will be unable to maintain our currently planned operations. If we cannot continue as a going concern, our stockholders would likely lose most or all of their investment in us.

Critical Accounting Policies and Estimates

This Management's Discussion and Analysis of Financial Condition and Results of Operations is based on our consolidated financial statements, which we have prepared in accordance with GAAP. The preparation of our consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported revenues and expenses during the reporting periods. We evaluate these estimates and judgments on an ongoing basis. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Our actual results may differ from these estimates under different assumptions or conditions.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The following sections provide quantitative information on our exposure to interest rate risk and foreign currency exchange risk. We make use of sensitivity analyses, which are inherently limited in estimating actual losses in fair value that can occur from changes in market conditions.

Interest Rate Risk

Our primary exposure to market risk is interest rate risk associated with debt financing that we utilize from time to time to fund operations or specific projects. The interest on this debt is usually determined based on a fixed rate and is contractually set in advance. At September 30, 2020, and December 31, 2019, we had $5.8 million and $1.8 million, respectively, in interest-bearing debt instruments on our consolidated balance sheet. All of our interest-bearing debt is at fixed rates for the next five years, at which point one outstanding loan will have a one-time rate reset for the remainder of its term.

Foreign Currency Exchange Risk

Our functional currency is the U.S. Dollar. The functional currency of our Canadian subsidiary is the Canadian Dollar, and the functional currency of our Panama, U.S., and Brazil subsidiaries is the U.S. Dollar. For the Canadian Subsidiary, assets and liabilities are translated at the exchange rates in effect at the balance sheet date, equity accounts are translated at the historical exchange rate, and the income statement accounts are translated at the average rate for each period during the year. Net translation gains or losses are adjusted directly to a separate component of other comprehensive loss within shareholders' equity (deficit).

Item 4. Controls and Procedures

Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Form 10-Q. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the quarter ended September 30, 2020, the Company's disclosure controls and procedures are effective in recording, processing, summarizing, and reporting, on a timely basis, information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act and are effective in ensuring that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(g) and 15d-15(f)) that occurred during the fiscal quarter covered by this report that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

Lawsuit Against the FDA Approval of AquAdvantage Salmon

On March 30, 2016, a coalition of non-governmental organizations filed a complaint in the United States District Court for the Northern District of California against the FDA, the United States Fish and Wildlife Service, and related individuals for their roles in the approval of AquAdvantage salmon. Subsequently, the Fish and Wildlife Service was dismissed from the case, and we joined the case as an intervenor to protect our interests. The coalition, including the Center for Food Safety and Friends of the Earth, claims that the FDA had no statutory authority to regulate bioengineered animals, and, if it did, that the agency failed to analyze and implement measures to mitigate ecological, environmental, and socioeconomic risks that could impact wild salmon and the environment, including the risk that AquAdvantage salmon could escape and threaten endangered wild salmon stocks. The court issued an initial ruling that the FDA has statutory authority to regulate bioengineered animals. The substantive briefing on the specific challenge to the FDA's approval of the original AquAdvantage salmon NADA has been completed and oral arguments on this part of the case concluded in August 2020. We are waiting for a ruling from the court.

Other than as set forth above, we are not party to any legal proceedings the outcome of which, we believe, if determined adversely to us, would individually or in the aggregate have a material adverse effect on our future business, consolidated results of operations, cash flows, or financial position. We may, from time to time, be subject to legal proceedings and claims arising from the normal course of business activities.

Item 1A. Risk Factors

As disclosed in "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2019, which was filed on March 10, 2020, and our Quarterly Report on Form 10-Q, for the quarter ended June 30, 2020, which was filed on August 6, 2020, there are a number of risks and uncertainties that may have a material effect on the operating results of our business and our financial condition. The following risk factors are either new or have changed materially from those set forth in our Annual Report on Form 10-K for the year ended December 31, 2019. You should carefully review the risks involved and those described in our Annual Report on Form 10-K, our Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, and in other reports we file with the Securities and Exchange Commission in evaluating our business.

Risks Relating to our Business

Ethical, legal, and social concerns about bioengineered products and perceived environmental impacts could lead to legal challenges, limit or prevent the use of our products, and limit our revenues.

Our technologies include the use of bioengineering. Public perception about the safety and environmental hazards of, and ethical concerns over, bioengineered products could influence public acceptance of our technologies and products. Activist groups opposing the bioengineering of organisms have in the past pressured a number of retail food outlets and grocery chains to publicly state that they will not carry bioengineered Atlantic salmon, and they could file lawsuits to prevent the production and sale of our products. If we are not able to overcome the ethical, legal, and social concerns relating to bioengineering, products using our technologies may not be accepted in the marketplace, and demand for our products could fall short of what we expect. These concerns could also result in increased expenses, regulatory scrutiny, delays, or other impediments to implementation of our business plan.

The subject of bioengineered products has received negative publicity, which has aroused public debate. This adverse publicity could lead to lawsuits against the production, distribution, and sale of bioengineered products; greater regulation of those products; and trade restrictions on their importation. Further, there is a concern that products produced using our technologies could be perceived to cause adverse events, which could also lead to negative publicity.

Business, political, or economic disruptions or global health concerns, such as the COVID-19 pandemic, could seriously harm our current or planned business and increase our costs and expenses.

Broad-based business or economic disruptions, political instability, or global health concerns could adversely affect our current or planned production, sale, distribution, research and development, and expansion. For example, the COVID-19 pandemic has continued to spread, and the related adverse public health developments, including orders to shelter-in-place, travel restrictions, and mandated business closures, have adversely affected workforces, organizations, customers, economies, and financial markets globally, leading to an economic downturn and increased market volatility. It has also disrupted the normal operations of many businesses, including ours.

Global health concerns like the coronavirus pandemic could in themselves result in social, economic, and labor instability in the countries in which we or the third parties with whom we engage operate. The COVID-19 pandemic and government measures taken in response have also had a significant impact, both direct and indirect, on businesses and commerce, as worker shortages have occurred; supply chains have been disrupted; facilities and production have been suspended; and demand for certain goods and services, such as medical services and supplies, has spiked, while demand for other goods and services, including salmon in the institutional sales chain that includes restaurants, has fallen, with a resulting drop in the prices for those goods and services. We have been impacted by the reduction in food service demand for salmon due to the pandemic in the form of significantly lower than expected sales and a reduction in the value of our inventory. In response to the COVID-19 pandemic, we have provided our administrative employees with the option to work remotely, and we have limited the number of staff in any given area of our farm sites. We have also implemented policies and procedures at our farms to react to any outbreak of the virus.

As a result of the COVID-19 pandemic, we may experience disruptions that could severely impact our business, including disruptions or restrictions on our ability to travel, obtain regulatory approvals from the FDA and other regulators, pursue partnerships and other business transactions, conduct production activities, and make shipments, as well as be impacted by the temporary closure of the facilities of suppliers. While we have taken steps to address the impact of the coronavirus on our operations, and we believe that our suppliers and potential customers continue to operate in the ordinary course in all material respects, we cannot presently predict the scope and severity of any additional business shutdowns or disruptions or the future impact on consumer demand. If we or any of the third parties with whom we engage, including suppliers, distributors, service providers, regulators, and overseas business partners, experience additional or continued shutdowns or other disruptions, or consumer demand remains materially reduced, our ability to conduct our business in the manner and on the timelines presently planned could be materially and negatively impacted, our anticipated revenues could decrease, and our costs and expenses could rise as a result of our efforts to address such disruptions.

In addition, the trading prices for our common stock and the stock of other biotechnology and food companies have been highly volatile as a result of the COVID-19 pandemic. As a result, we may face difficulties raising capital through sales of our common stock or such sales may be on unfavorable terms. The COVID-19 pandemic continues to rapidly evolve, and the extent to which it may impact our business and planned programs will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the ultimate geographic spread of the disease; the duration of the pandemic; travel restrictions and other actions to contain the pandemic or address its impact, such as social distancing and quarantines or lock-downs in the United States, Canada, and other countries; business closures or business disruptions; and the effectiveness of actions taken in the United States, Canada, and other countries to contain and address the disease.

Our ability to generate revenue to support our operations depends on maintaining regulatory approvals for AquAdvantage salmon and our farm sites and obtaining new approvals for farm sites and the sale of our products in other markets, the receipt of which is uncertain.

As a bioengineered animal for human consumption, AquAdvantage salmon required approval from the FDA in the United States and the Ministers of Health and Environment in Canada before it could be produced, sold, or consumed in those countries. Our FDA approval covers the production of our eggs in our hatchery in Canada and the grow-out of our eggs in our facilities in Indiana and Rollo Bay. FDA approvals will be needed for each additional facility we plan to operate. Additionally, we will require local regulatory approvals in other countries in which we hope to operate. There is no guarantee that we will receive or be able to maintain regulatory approvals from the FDA or other regulatory bodies or that there will not be a significant delay before approval. There is also no guarantee that any approvals granted will not be subject to onerous obligations in relation to matters such as production or labeling, or that any regulator will not require additional data prior to approval, which may be costly and time-consuming to acquire.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels and statutory, regulatory, and policy changes. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of other agencies on which our operations may rely is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also slow the time necessary for new applications to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years the U.S. government has shut down several times, and certain regulatory agencies, such as the FDA, have had to furlough critical FDA and other government employees and stop critical activities. Separately, in response to the COVID-19 pandemic, on March 10, 2020, the FDA announced its intention to postpone most inspections of foreign manufacturing facilities and products through April 2020. On March 18, 2020, the FDA announced its intention to temporarily postpone routine surveillance inspections of domestic manufacturing facilities. Regulatory authorities outside the United States may adopt similar restrictions or other policy measures in response to the COVID-19 pandemic. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business. Future shutdowns could also affect other government agencies, such as the SEC, which may also impact our business by delaying review of our public filings, to the extent such review is necessary, and our ability to access the public markets.

Security breaches and other disruptions could compromise our information, expose us to fraud or liability, or interrupt our operations, which would cause our business and reputation to suffer.

In the ordinary course of our business, we use our servers and networks to store sensitive data, including our proprietary business and financial information; general business information regarding our customers, suppliers, and business partners; and personally identifiable information of our employees. The secure storage and maintenance of this information is critical to our operations. Despite our security measures, our information technology and infrastructure may be vulnerable to attacks by hackers or breached due to employee error or malfeasance. A breach of our security could compromise our networks, and the information stored there could be accessed, manipulated, publicly disclosed, lost, or stolen. Any such access, manipulation, disclosure, or loss of information could result in errors in our records, fraudulent use of our financial information or theft of assets, legal claims or proceedings, liability under laws that protect the privacy of personal information, theft of our intellectual property, or damage to our reputation. In addition, our systems could be the subject of denial of service or other interference, which could disrupt our operations and commercial transactions. Any of the foregoing could adversely affect our business, revenues, and competitive position.

If our technologies or products are stolen, misappropriated, or reverse engineered, or we find it necessary to grant interests in our technologies to third parties, others could use the technologies to produce competing technologies or products or could limit our ability to fully realize the value of those technologies.

Third parties, including our collaborators, contractors, and others involved in our business often have access to, and may require that we grant interests in, our technologies. If our technologies or products were stolen, misappropriated, or reverse engineered, or if we are forced to grant broad interests in our technologies, they could be used by other parties that may be able to reproduce our technologies or products using our technologies for their own commercial gain. If this were to occur, it would be difficult for us to challenge this type of use, especially in countries with limited intellectual property protection. In addition, third parties granted interests in our technologies could seek to prevent or limit our use or commercialization of those technologies based on claims of partial ownership.

If we lose key personnel, including key management personnel, or are unable to attract, train, and retain additional personnel, it could delay our commercialization plans, limit our production capacity, or harm our research and development efforts, and we may be unable to sell or develop our own products.

Our success depends substantially on the efforts and abilities or our officers and other key employees. The loss of any key members of our management, or the failure to attract or retain other key employees who possess the requisite expertise for the conduct of our business, could prevent us from developing and commercializing our products and executing on our business strategy. We may not be able to attract or retain qualified employees in the future due to the intense competition for qualified personnel among aquaculture, biotechnology, and other technology-based businesses, or due to the unavailability of personnel with the particular qualifications or experience necessary for our business. For production positions, effective training will be needed for new hires due to the overall lack of industry experience in land-based aquaculture in North America. If we are not able to attract, train, and retain the necessary personnel to accomplish our business objectives, we may experience staffing constraints that could adversely affect our ability to meet the demands of our customers in a timely fashion, adequately staff existing or new production facilities, or support our internal research and development programs. In particular, our production facilities require individuals experienced or trained in RAS-based aquaculture, and our product development programs are dependent on our ability to attract and retain highly skilled scientists. Competition for experienced production staff, scientists, and other technical personnel from numerous companies and academic and other research institutions may limit our ability to attract and retain such personnel on acceptable terms.

A shutdown of or damage to any of our farms could result in our prematurely harvesting fish, a loss of a material percentage of our fish in production, a delay in our commercialization plans, and a negative impact on our results of operations.

At present, we only have farms in Albany, Indiana, and Prince Edward Island, Canada. As an interruption in the oxygen supply, water quality systems, or other critical infrastructure of an aquaculture facility for more than a short period of time can lead to the loss of a large number of fish, any shutdown of or damage to either of our farms—for example, due to natural disaster, reduction in water supply, interruption in services beyond our backup capacity, or human interference—could require us to prematurely harvest some or all of the fish at that farm or could result in a loss of a material percentage of our fish in production. Shutdown or significant damage could also result in delays in our commercialization plans, an inability to meet customer demand, an increase in costs, and a negative impact on our results of operations.

The successful development of our business depends on our ability to efficiently and cost-effectively produce and sell salmon at large commercial scale.

Although we have over two decades of experience in successfully raising Atlantic salmon in land-based systems, we have only begun to produce them at commercial scale. Our business plans depend on our ability to increase our production capacity through the development of larger farms. We have limited experience constructing, ramping up, and managing such large, commercial-scale facilities, and we may not have anticipated all of the factors that could affect our production, harvest, sale, and delivery of salmon at such a scale. For example, our salmon may not perform as expected when raised at very large commercial scale, we may encounter operational challenges for which we are unable to identify a workable solution, control deficiencies may surface, our vendors may experience capacity constraints, or our production cost and timeline projections may prove to be inaccurate. Any of these could decrease process efficiency, create delays, and increase our costs. We are also subject to volatility in market demand and prices, such as the disruption to the salmon market and the resulting reduction in market prices for salmon caused by the COVID-19 pandemic.

We remain dependent on third parties for the processing, distribution, and sale of our products.

At present, we rely on third parties to process our fish, deliver them to seafood vendors, and ultimately sell them to consumers. While we carefully select processors or other intermediaries in the supply chain, any failure on their part to maintain quality standards or proper food handling processes could subject us to product liability claims, product recalls, increased scrutiny from regulators, and loss of consumer confidence in the safety and quality of our products. Seafood vendors may reject our products due to their particular product or volume requirements, extract pricing concessions that reduce our margins, or fail to adequately promote and sell our products. Our reliance on third parties could therefore result in a reduction in our revenues, an increase in our costs, delays in commercialization, additional regulatory requirements, or negative public opinion that could impact future sales and growth.

Risks Relating to our Common Stock

The significant share ownership position of certain affiliates allows them to influence corporate matters.

Based solely on a Schedule 13D/A filed on August 13, 2020, by Randal J. Kirk; Third Security; TS AquaCulture LLC (“TS AquaCulture”); and TS Biotechnology Holdings, LLC (“TS Biotechnology”), TS AquaCulture owns 8,239,199 shares of our common stock, or approximately 18.3% of our outstanding shares, and TS Biotechnology owns 9,175,000 shares of our common stock, or approximately 20.4% of our outstanding shares. In addition, entities controlled by Mr. Kirk, including Third Security and its affiliates other than TS AquaCulture and TS Biotechnology, currently hold 837,554 shares of our common stock, or approximately 1.9% of our outstanding shares. TS AquaCulture and TS Biotechnology are managed by Third Security, and TS AquaCulture is successor-in-interest to Precigen under the Relationship Agreement. See “Related-Party Transactions, Policies, and Procedures-Relationship Agreement with TS AquaCulture.” Further, Alana D. Czypinski, a member of the Company’s Board of Directors, is married to Randal J. Kirk and has reported that she owns 3,249 shares of our common stock, which includes 1,090 shares of common stock underlying outstanding stock options that are or will be immediately exercisable within 60 days of September 30, 2020 in her own name, which is less than one percent of our outstanding shares. Based on these holdings, Mr. Kirk, Third Security’s Chief Executive Officer and Senior Managing Director, and Ms. Czypinski have each reported control over approximately 40.6% of our outstanding shares. Mr. Kirk and Ms. Czypinski each disclaim beneficial ownership of the shares owned directly by the other, and Ms. Czypinski disclaims beneficial ownership of the shares deemed beneficially owned by Mr. Kirk, other than those that she owns directly.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

EXHIBIT INDEX

Exhibit Number	Exhibit Description
10.1*†	Loan and Security Agreement by and between AquaBounty Farms Indiana LLC and First Farmers Bank and Trust, dated as of July 31, 2020 (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-36426) filed on August 6, 2020).
10.2*	Term Note granted by AquaBounty Farms Indiana LLC in favor of First Farmers Bank and Trust, dated as of July 31, 2020 (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-36426) filed on August 6, 2020).
10.3*	Mortgage, Assignment of Rents and Leases, Security Agreement, Fixture Filing and Financing Statement granted by AquaBounty Technologies, Inc. in favor of First Farmers Bank and Trust, dated as of July 31, 2020 (incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-36426) filed on August 6, 2020).
10.4*	Guarantor Security Agreement by and between AquaBounty Technologies, Inc. and First Farmers Bank and Trust, dated as of July 31, 2020 (incorporated by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-36426) filed on August 6, 2020).
10.5*	Unconditional and Continuing Secured Guaranty Agreement by and between AquaBounty Technologies, Inc. and First Farmers Bank and Trust, dated as of July 31, 2020 (incorporated by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-36426) filed on August 6, 2020).
10.6*	Collateral Access Agreement by and between AquaBounty Technologies, Inc. and First Farmers Bank and Trust, dated as of July 31, 2020 (incorporated by reference to Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-36426) filed on August 6, 2020).
10.7*	Unconditional and Continuing Guaranty Agreement by and between AquaBounty Farms, Inc. and First Farmers Bank and Trust, dated as of July 31, 2020 (incorporated by reference to Exhibit 10.8 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-36426) filed on August 6, 2020).
10.8*	Environmental Indemnity Agreement by and among AquaBounty Technologies, Inc., AquaBounty Farms Indiana LLC, and First Farmers Bank and Trust, dated as of July 31, 2020 (incorporated by reference to Exhibit 10.9 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-36426) filed on August 6, 2020).
31.1	Certification of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1+	Certification of the Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

* Previously filed

† Schedules, exhibits, and similar supporting attachments or agreements to the Loan and Security Agreement are omitted pursuant to Item 601(a)(5) of Regulation S-K. The Registrant agrees to furnish a supplemental copy of any omitted schedule or similar attachment to the Securities and Exchange Commission upon request.

+ The certification furnished in Exhibit 32.1 hereto is deemed to accompany this Form 10-Q and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended. Such certification will not be deemed to be incorporated by reference into any filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that the Registrant specifically incorporates it by reference.

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

	AQUABOUNTY TECHNOLOGIES, INC.
November 3, 2020	/s/ Sylvia Wulf
	Sylvia Wulf
	President, Chief Executive Officer, and Director (Principal Executive Officer)
November 3, 2020	/s/ David A. Frank
	David A. Frank
	Chief Financial Officer and Treasurer (Principal Financial Officer and Principal Accounting Officer)

EXHIBIT 31.1

Certification

I, Sylvia Wulf, certify that:

1. I have reviewed this quarterly report on Form 10-Q of AquaBounty Technologies, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) designed such internal controls over financial reporting, or caused such internal controls over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):

(a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and

(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date:	November 3, 2020	/s/ Sylvia Wulf
		Sylvia Wulf *Chief Executive Officer* (Principal Executive Officer)

EXHIBIT 31.2

Certification

I, David A. Frank, certify that:

1. I have reviewed this quarterly report on Form 10-Q of AquaBounty Technologies, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) designed such internal controls over financial reporting, or caused such internal controls over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):

(a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and

(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date:	November 3, 2020	/s/ David A. Frank
		David A. Frank *Chief Financial Officer* (Principal Financial Officer)

EXHIBIT 32.1

The following certification is being made to the Securities and Exchange Commission solely for purposes of Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. 1350). This certification is not to be deemed a part of the Report, nor is it deemed to be "filed" for any purpose whatsoever.

In accordance with the requirements of Section 906 of the Sarbanes-Oxley Act of 2002 (18 USC 1350), each of the undersigned hereby certifies, to his knowledge, that:

(i) the Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2020, which this statement accompanies, fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

(ii) the information contained in the Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2020, fairly presents, in all material respects, the financial condition and results of operations of AquaBounty Technologies, Inc.

Dated as of this 3rd day of November, 2020.

/s/ Sylvia Wulf	/s/ David A. Frank
Sylvia Wulf	David A. Frank
Chief Executive Officer	*Chief Financial Officer*
(Principal Executive Officer)	(Principal Financial Officer)