

AquaBounty Technologies

Investor Presentation

March 2019

AquaBounty

Forward-Looking Statements

Safe Harbor Statement

This presentation contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements other than statements of historical fact contained in this presentation are forward-looking statements, including, but not limited to, statements regarding the economic viability of land-based production facilities, the economic and operational benefits of AquaAdvantage salmon (“AAS”), and the potential for increases in EBITDA and the profitability of AquaBounty; projected growth in seafood consumption, expansion of the aquaculture industry, and increasing demand for salmon; continuing supply constraints and their impact on pricing; market interest in land-based aquaculture; the anticipated benefits of AAS and land-based production to consumers and the environment; non-exposure to pathogens, parasites, or environmental contaminants; the potential for consumer acceptance of AAS; AquaBounty’s commercial strategy, including demonstration of commercial viability, successful positioning and messaging of AAS, the establishment and types of sales channels, and agreements with distributors and industrial producers; the timing of the introduction of AAS eggs into the Indiana facility and future harvests; the potential for the development of additional products and production sites; and the completion of field trials, approval of AAS, and potential relationships with local partners in other markets. Although management believes that the plans, objectives, and expectations reflected in or suggested by these forward-looking statements are reasonable, all forward-looking statements involve risks and uncertainties, and actual future results may be materially different from the plans, objectives, and expectations expressed in this presentation. These risks and uncertainties include, but are not limited to, (i) the anticipated benefits and characteristics of AAS; (ii) the uncertainty of achieving the business plan, future revenue, and operating results; (iii) developments concerning our research projects; (iv) our ability to successfully enter new markets or develop additional products; (v) competition from existing technologies and products or new technologies and products that might emerge; (vi) actual or anticipated variations in our operating results; (vii) our cash position and ability to raise additional capital to finance our activities; (viii) market conditions in our industry; (ix) our ability to protect our intellectual property and other proprietary rights and technologies; (x) our ability to adapt to changes in laws or regulations and policies; (xi) the ability to secure and maintain any necessary regulatory approvals to commercialize any products; (xii) the rate and degree of market acceptance of any products developed through the application of genetic engineering, including genetically modified fish; (xiii) our ability to retain and recruit key personnel; (xiv) the ability of our majority shareholder, Intrexon Corporation, to control us; (xv) the success of any of our future acquisitions or investments; (xvi) international business risks and exchange rate fluctuations; (xvii) the possible volatility of our stock price; (xviii) our limited operating history and track record of operating losses; and (xix) 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 presentation are subject. For a discussion of other risks and uncertainties, and other important factors, any of which could cause our actual results to differ from those contained in the forward-looking statements, see AquaBounty’s public filings with the Securities and Exchange Commission (“SEC”), available on the “Investors” section of our website at www.aquabounty.com and on the SEC’s website at www.sec.gov. Forward-looking statements are not promises or guarantees of future performance, and we may not actually achieve the plans, intentions, or expectations disclosed in 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, and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, or investments that we may make. All information in this presentation is as of the date of its release, and AquaBounty undertakes no duty to update or revise this information unless required by law.

Executive Summary

- AquaBounty Technologies (AQB) is focused on enhancing productivity and sustainability in the \$176B aquaculture market through the use of biotechnology, particularly in land-based Recirculating Aquaculture Systems (RAS).
- Received approval in the United States and Canada for the first bioengineered food animal, AquAdvantage Salmon (AAS). Its accelerated growth is expected to deliver 2.5-3.0x EBITDA versus conventional farmed salmon.
- Final U.S. regulatory hurdle cleared in March 2019, accelerating opportunity to commercialize in the US with the import of AquAdvantage eggs.
- 25 years operating land-based RAS facilities; more than any other producer.
 - Conventional salmon in process in Indiana, developing supply chain and logistics capabilities in advance of import alert lift
 - First US and Canadian AAS harvests expected in Q4 2020
- Positive market feedback received, demonstrating early consumer acceptance, based upon three years of successful sales from Panama farm to Canada.
- Commercial development progressing in anticipation of 2020 harvest, including current discussions with major distributors and industrial producers.
- Partners, technology vendors, and sites identified for development in U.S. and abroad.

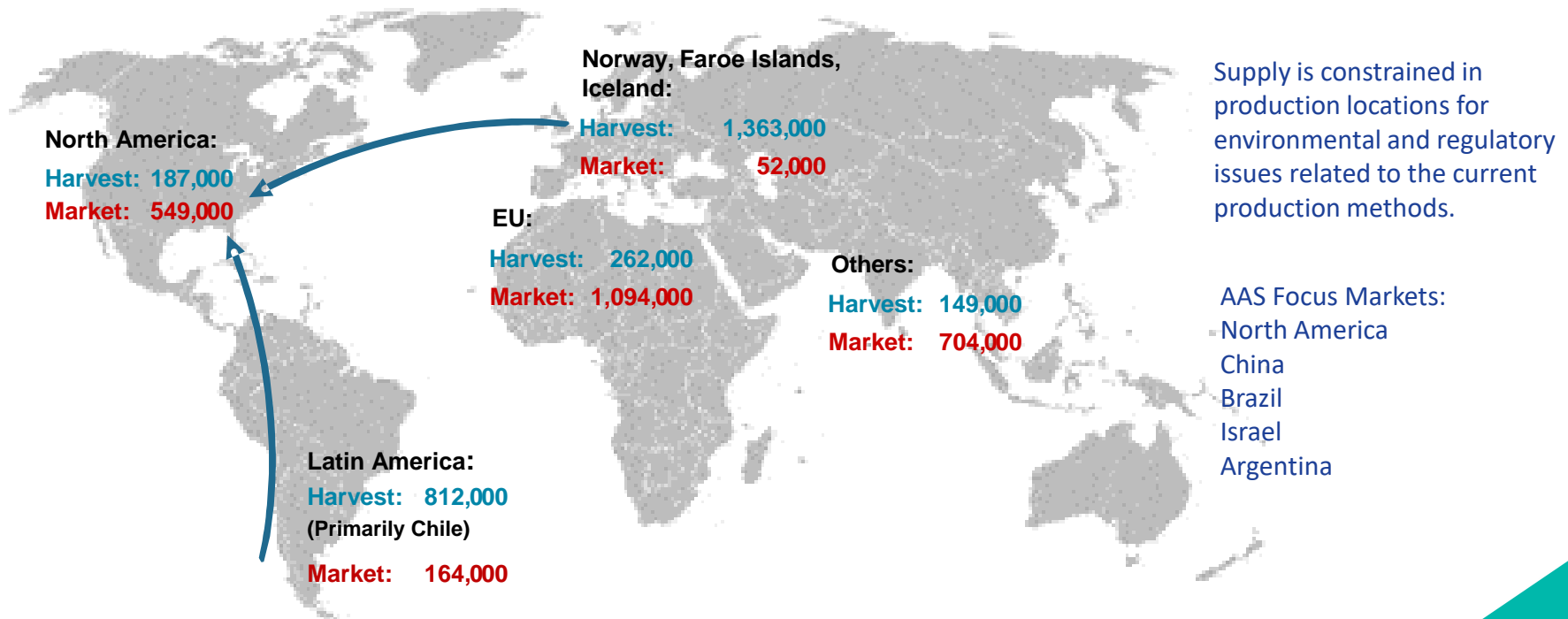
Market Overview

Market Outlook for AquaAdvantage Salmon – Overview

- Attractive market with favorable outlook:
 - Global demand expected to grow 7-9% annually for next 5 years
 - Supply constraints expected to continue supporting favorable pricing
- Increasing demand for salmon, driving investment into production from aquaculture, with growing interest in land-based aquaculture farming:
 - Significant restrictions on new licenses for ocean cage-based production limits supply increases from major traditional and ocean cage-based sources such as Chile
- AquaAdvantage Salmon has economic advantages over conventional salmon:
 - Operating cost/efficiency advantage over land-based conventional salmon
 - Transportation and sustainability advantages over imported, ocean cage-based conventional salmon
- Focus on attractive markets primarily served by imports: North America, Brazil, Israel, Argentina, and China

Atlantic Salmon Market – a Global Trade Opportunity

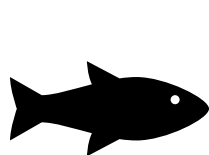
Worldwide Atlantic salmon market = 2.2m metric tons worth \$14 billion
(Source: FAO)



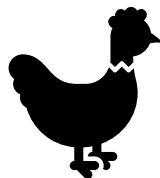
(Source: Kontali Analyse 2018) in metric tons gwt

U.S. Per Capita Protein Consumption

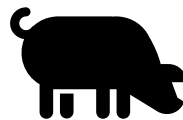
- According to USDA, among major proteins only seafood demand is outgrowing population growth
- Salmon consumption is among the fastest growing seafood, second only to shrimp
- Feed conversion ratios for seafood are advantaged over land-based proteins, making it a more sustainable source of protein



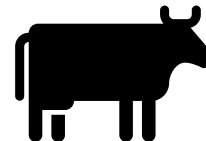
1:1



2:1



4:1

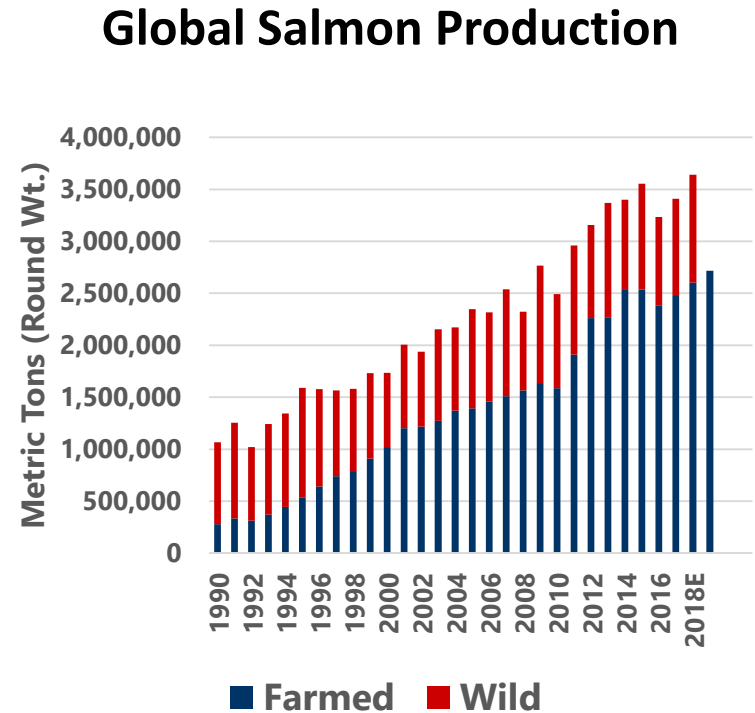
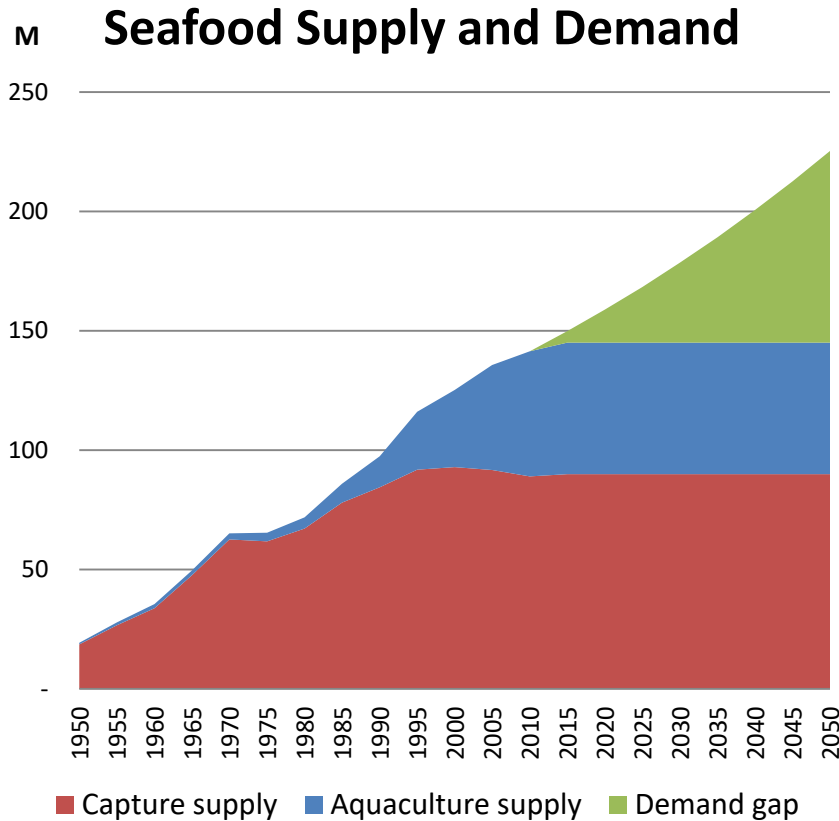


6:1

- When U.S. consumption is compared to other regions, particularly the European Union, there is significant opportunity to nearly double consumption—from 2.4 pounds per capita to 4.6 pounds per capita

Projected Gap in World Seafood Supplies

Aquaculture continues to grow



Sources: FAO (1990-2016) & Kontali Analyse estimates (2017-2019E).

Commercialization

The AquaAdvantage Salmon – Key Benefits

Operating in a land-based system provides significant advantages over the current production method of fish farming:

- Optimized growing conditions and fish health
- Biosecurity – no exposure to pathogens & parasites
- No need for antibiotics or medications
- Clean groundwater – no exposure to environmental contaminants
- Conserves water through recirculation
- Improved sustainability and reduced environmental impact



The World's Most Sustainable Salmon

Our healthy nutritious fish delivers the biggest benefit with the smallest environmental footprint

Closer to Market

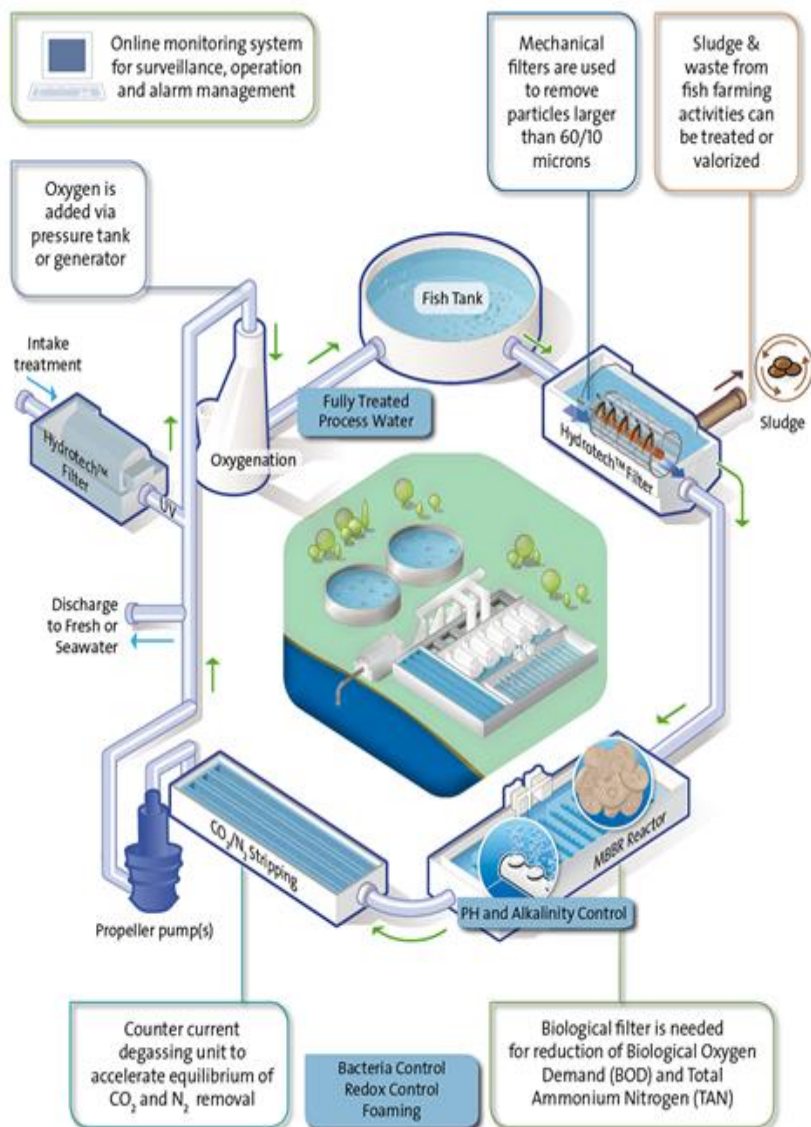
AquaAdvantage salmon is grown close to consumers, providing locally grown, fresh product and reducing transportation time and cost

Climate-smart salmon reducing the impact on our oceans and carbon

Commercial Strategy

- Demonstrate commercial viability and consumer acceptance utilizing production from Indiana and Prince Edward Island
- Establish supply chain and logistics requirements
- Refine product positioning and message prioritization for consumer and customer support
 - Emphasize sustainability messages
 - Determine appropriate media and prepare for response to detractors
- Develop market, channel, and customer segmentation as part of the pre-commercialization efforts
 - Initial targets focused on Foodservice and secondary processors due to limited production quantities
- Continue international business development
 - Brazil – complete trials and identify commercial partner
 - Israel – finalize JV structure and obtain financing
 - Argentina – determine site location and operating partner
 - China – obtain governmental support and define next steps after completion of field trials

25 Years of Operation Expertise in RAS



AAS reaches target weight in shorter time and consumes less feed to reach target weight than conventional Atlantic Salmon.

AAS enables land-based, environment-friendly production system to be economically viable versus current sea-cage production systems.

AAS will be raised in Recirculating Aquaculture Systems (RAS), away from the ocean, eliminating the risk of pollutants or contaminants that could harm marine ecosystems.

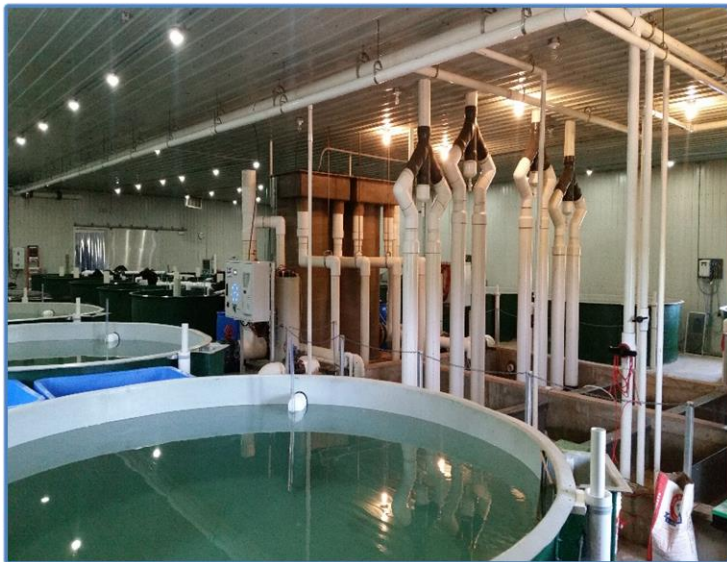
AAS, raised in RAS, enables optimized conditions with total control of the water coming in and going out, while recycling greater than 95% of the water used.

Production in Process in U.S. and Canada



Albany, Indiana

- Purchased first commercial-scale operating site for AAS in the U.S. from Bell Fish Co. in 2017
- Facility renovated and upgraded, improving capacity to 1200 MT/YR
- Conventional salmon introduced in June 2018 with harvest in Q3 2020
- AAS eggs planned for late Q2 2019 with harvest expected in Q3 2020



Prince Edward Island, Canada

- Purchased former Atlantic Sea Smolt Hatchery in 2016
- Three buildings including:
 - R&D hatchery
 - 250 MT AAS grow out
 - New Broodstock facility
- First production harvest expected in Q4 2020

Regulatory Overview

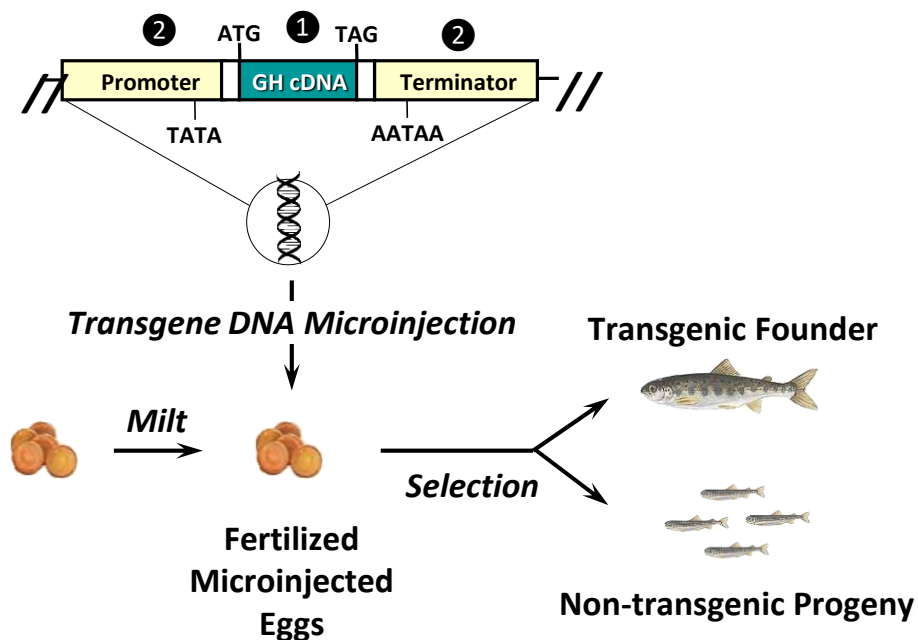
- Bioengineered food products have been developed, reviewed by regulators, and approved for use in the United States, Canada and other major markets for decades
- AQB's development of bioengineered salmon represents the first bioengineered animal to have completed these regulatory processes
 - The dramatically superior economics of AAS makes inland farming economically viable
 - The improved time from eggs to harvest does not impact the finished product—taste, nutritional qualities, and texture are identical to conventional salmon
 - Regulatory review of AAS has resulted in approvals in the U.S. and Canada, as well as field trial approvals in Brazil and Argentina

Technology Overview

Bioengineered AquAdvantage Salmon results in superior growth & economics

AquaBounty's core technology is based on the AquAdvantage gene construct, containing:

- 1 DNA sequence from chinook salmon GH-1 to accelerate growth
- 2 Regulatory elements provide on-off switch enabling the accelerated growth

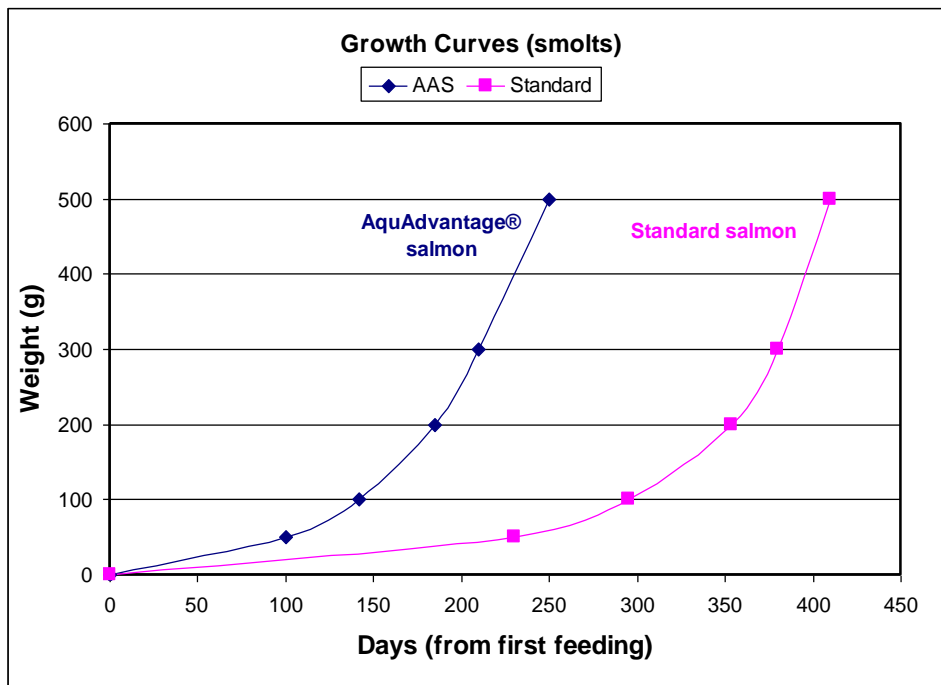


- The AquAdvantage gene construct dramatically improves growth rates and production economics
- Husbandry requirements for the AquAdvantage Salmon are substantially the same as for conventional salmon in land-based production
- Resulting harvest delivers salmon indistinguishable from conventional salmon as to taste, texture and nutritional quality
- Regulatory reviews have validated that this bioengineering delivers these benefits without any impact on product safety

AquAdvantage Salmon Growth Advantage

AAS growth rates are accelerated in the early rearing stages:

- Elapsed time from first feeding to harvest reduced from ~28 to ~18 months
- Reduction can result in **~2X greater annual harvest** vs. conventional salmon, and this “capacity” advantage improves economic returns
- Additionally, feed utilization by AquAdvantage Salmon improves by ~25%, requiring less feed to reach the same target weight



AAS Production / Husbandry Considerations

AAS production and husbandry practices are comparable to those for land-based conventional salmon farms – see below for notable factors for AAS operations:

| | |
|--|---|
| Enhanced feed conversion requires modified protocols | <ul style="list-style-type: none">• Expert management and titration of feeding schedules reduce the amount of feed required to achieve maximum growth rates |
| AAS genetic modifications are biologically contained | <ul style="list-style-type: none">• AAS are sterile and cannot reproduce• Provides protection of the AAS proprietary intellectual property |
| AAS are physically contained to meet regulatory guidelines | <ul style="list-style-type: none">• Regulatory approvals require multiple layers of physical containment to prevent fish from entering the environment (U.S. FDA and Health Canada) |

Overview of AAS Regulation

- As the *first* bioengineered animal product to be approved by U.S. and Canadian regulators, AAS's review included:
 - Examination of AAS's unique technology and characteristics
 - Determination of how such products should be evaluated
 - Governmental reviews, input from third-party experts, and public comments were invited and considered
- The thorough regulatory review of AAS required examination of several specific dimensions to assure its suitability for commercialization:
 - Safety for animal health
 - Safety for human consumption
 - Safety to the environment
 - Marketing considerations, including labeling, nutritional claims, and product characteristics

Summary of AAS Regulatory Actions

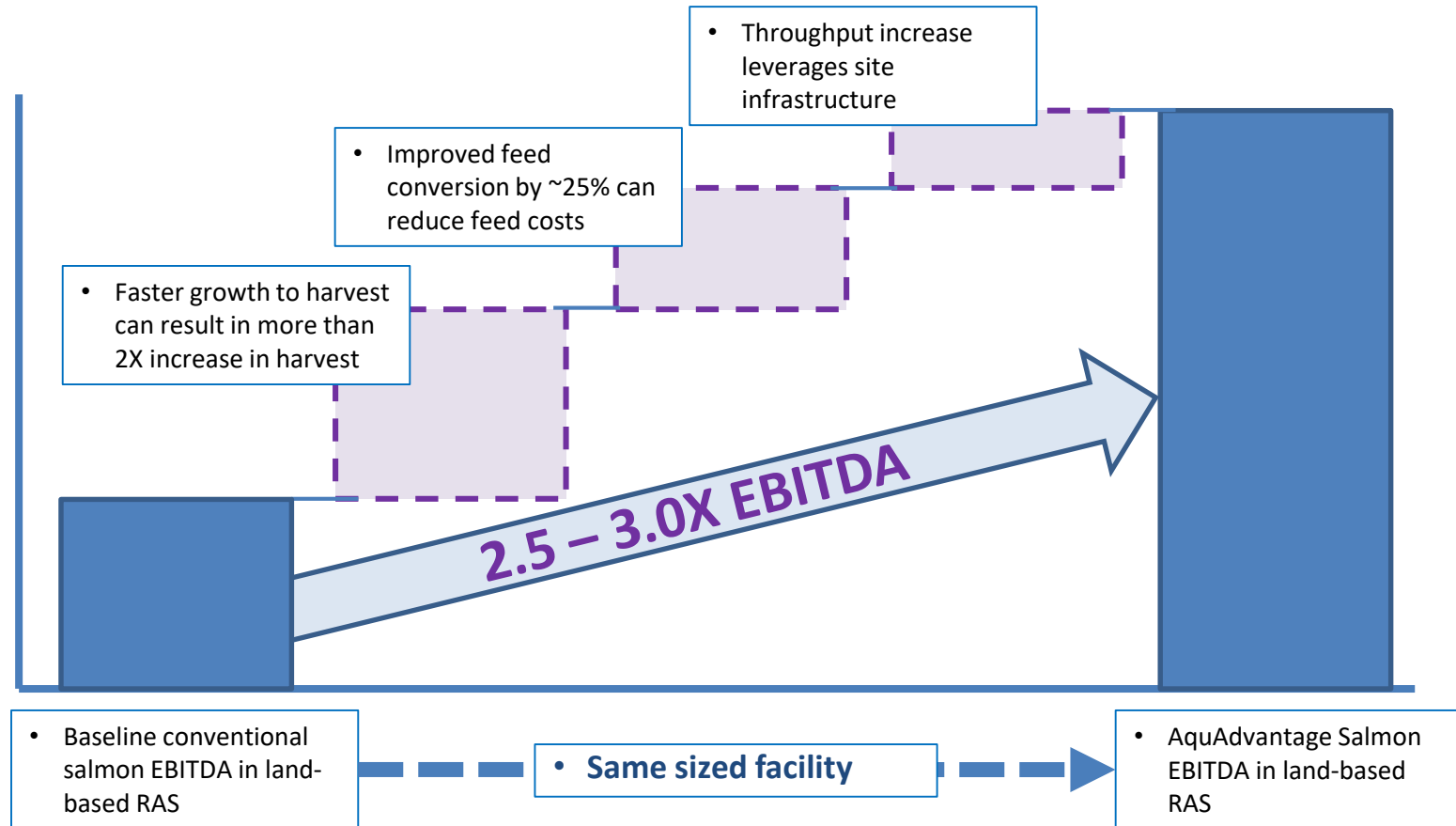
| Authority | Year | Particulars |
|---------------------------------|------|--|
| Panama – environmental approval | 2012 | <ul style="list-style-type: none">• Approval for operation of salmon farming operation• Application for commercial production is pending |
| US FDA | 2015 | <ul style="list-style-type: none">• Approval for production, sale, and human consumption• Specification of production and distribution requirements |
| Argentina – field trials | 2015 | <ul style="list-style-type: none">• Approval to import and conduct production field trials |
| Brazil – field trials | 2016 | <ul style="list-style-type: none">• Approval to import and conduct production field trials |
| Health Canada | 2016 | <ul style="list-style-type: none">• Approval for production, sale, and human consumption |
| US FDA – import approval | 2019 | <ul style="list-style-type: none">• Removal of importation ban on AAS |

AAS Economic Advantage vs. Conventional Salmon

- AquAdvantage Salmon can deliver EBITDA at 2.5 – 3.0X vs. conventional RAS salmon
- These economic benefits vs. conventional salmon reflect several key advantages:
 - Reduced time to harvest, from ~28 months to ~18 months for AAS results in dramatically improved utilization of the RAS plant investment, potentially resulting in doubling of farm-gate weight at harvest per year
 - Improved feed conversion can reduce feed costs by ~25%...the largest single component of RAS production expenses
 - Increased production levels can result in operating leverage for plant labor and oxygen expenses (primary components of “other direct expenses”)

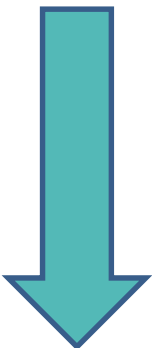
AAS Economics 2.5–3.0x Favorable vs. Conventional

Faster growth to harvest accelerates returns on investment in farm operations

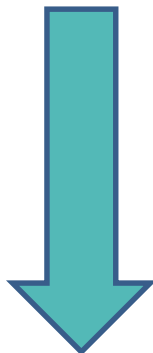


AquaBounty Technologies Today and Tomorrow

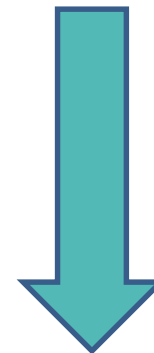
- Biotechnology leader providing molecular solutions addressing problems and opportunities in the global aquaculture industry
- World Class operator of land-based Recirculating Aquaculture Systems
- Committed to the excellent husbandry and nutrition of fish



**Additional
Species**



**Improvements in
RAS**



**Nutrition and
Disease**

Balance Sheet

| (in thousands) | As of December 31, | |
|--------------------------------|--------------------|-----------|
| | 2018 | 2017 |
| Balance Sheet Data: | | |
| Cash and CD's | \$ 3,003 | \$ 506 |
| Total assets | \$ 27,671 | \$ 23,732 |
| Debt | \$ 3,591 | \$ 3,084 |
| Stockholders' equity (deficit) | \$ 23,234 | \$ 17,981 |

- Shares outstanding at December 31, 2018 = 15,098,837
- Share price as of March 12, 2019 = \$3.48

Summary

- The aquaculture industry must double its output in the next 30 years to meet growing market demand. Farmed Atlantic salmon is a \$14B market, and AquaBounty is uniquely positioned to capitalize on that growth in consumer demand.
- Increased consumer demand for high-quality protein and food solutions that are sustainable fit in our sweet spot.
- AquaBounty has 25 years of experience growing Atlantic salmon in land-based RAS operations, more than any other producer.
- At an expected 2.5 to 3x increase in EBITDA, AquaAdvantage would significantly increase the profitability of Atlantic salmon production in land-based RAS operations.
- Increasing interest in our approach to aquaculture is providing significant opportunities to identify operating partners domestically and abroad.

Seasoned Leadership



Sylvia Wulf – Executive Director, President and Chief Executive Officer

- Appointed an Executive Director, President and CEO in January 2019
- President of Manufacturing and SVP of Merchandising for US Foods, a \$23 billion broad line foodservice distributor with responsibility for the P&L of the \$10 billion Meat, Seafood and Produce operations and the \$1 billion Manufacturing Division of U.S. Foods
- Expertise spans a diverse set of company environments including start-up, rapid growth, mature, consolidation and traditional businesses ranging in size from \$100 million to \$10 billion in revenue
- Success in growing revenue and market share coupled with strengths in strategy development, mergers & acquisitions, environmental & social governance and operations positively impacted respected brands such as US Foods, Tyson, Sara Lee and Bunge



David A. Frank – Chief Financial Officer and Treasurer

- Appointed CFO in October 2007
- Previously served as President and General Manager of TekCel, a subsidiary of Magellan Biosciences, after serving as Magellan's CFO since the company's founding in 2004 and as TekCel's CFO since 2003
- Over 28 years of financial-management experience, including as CFO of SmartEnergy during its period of rapid growth from less than \$1 million in revenue in 2000 to more than \$45 million in 2002
- Mr. Frank has a BS in finance and accounting from Boston College and an MBA from Babson College



Alejandro Rojas, DVM – Chief Operating Officer

- Joined AquaBounty as the Chief Operating Officer of AquaBounty Farms division in February 2014
- Formerly Production and Technical Manager for Marine Harvest from 1988 to 2000
- Dr. Rojas has a doctorate in veterinary medicine and for the past 14 years has been a technical advisor and consultant to numerous global aquaculture and biotech companies working with marine fish



Ronald L. Stotish, PhD – Executive Director and Chief Technology Officer

- Appointed Executive Director and Chief Technology Officer of in January 2019 after having served as Executive Director, President and Chief Executive Officer of the Company since May 2008 and as Senior Vice President for R&D and Regulatory Affairs since 2006
- Prior to joining AquaBounty, Dr. Stotish held executive positions at MetaMorphix, Fort Dodge Animal Health, American Cyanamid, and Merck

AquaBounty Technologies

AquaBounty