## 2017 Impact Report

## The Agriculture Capital Way

# REGENERATIVE









# BY PEOPLE, FOR PEOPLE



Published Summer 2018





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## 1 Introduction

## Agriculture Capital is pleased to present our 2017 Impact Report, *Regenerative Food: By People, For People.*

This annual publication provides an updated perspective on our contribution to the evolving conversation around regenerative food and agriculture. In last year's report, we offered a glimpse into our vision for applying regenerative management strategies across our vertically integrated, appropriately scaled, customer-driven permanent crop enterprise. This year, we take one deliberate step toward that vision.

#### OUR IMPACT OBJECTIVES

PRODUC

#### PRODUCING HEALTHIER FOOD





#### ADVANCING RESPONSIBLE PRODUCTION



We dedicate this report to people. It is people who comprise our teams, people who invest the capital to support our teams' efforts, and ultimately, people who seek out and enjoy the food that our teams work hard to produce. Without the dedicated effort and interest of all of these people, a mission-driven business with the articulated purpose of growing access to better, healthier food would not be possible.

One of our core values at AC is **transparency**, and this report represents our desire for a food system that benefits from open communication among all stakeholders. There are enormous opportunities in driving toward a more sustainable, more responsible food system; there are also many challenges in getting there. It takes resolve and focus, and we're honored to be a part of this dynamic process. We enthusiastically invite your participation in our humble efforts, which are improved by new ideas.

Cease being intimidated by the argument that a right action is impossible because it does not yield maximum profits, or that a wrong action is to be condoned because it pays.

-Aldo Leopold

### WHO WE ARE

Agriculture Capital is a mission-driven investment firm aspiring to infuse regenerative management into a rapidly evolving food system.

With humility, we acknowledge that the pathway to regenerative agriculture is long and winding and will never lead to absolute success. Agriculture has taken millennia to become what it is today and will take time to evolve into new models that fully restore and renew communities and landscapes.

That said, we have built our teams around that goal and focus our efforts on asking the kinds of questions that can drive change in the way we manage risk, in the way we demonstrate leadership, and in the way we deliver financial results. We have assembled unique investment and operational expertise around a common ideal and have built systems throughout our business that enable collaboration and information-sharing that is unusual in comparable food systems.

### **OUR CORE VALUES**



#### EXCELLENCE

Being the best at what we do: investment, innovation, production, returns, product delivery



#### ACCOUNTABILITY

We all play a part in creating value and we are all accountable for our actions and performance



#### TRANSPARENCY

Openness in our interactions, communication, and data-sharing

### STEWARDSHIP

Continued asset-level progress against AC Way framework; category leadership Across our two investment funds (as of December 31, 2017), Agriculture Capital manages approximately 11,000 farmable acres (nearly 2,500 acres that are in transition or under evaluation for transition to organic); four food processing facilities; and a commercial tree nursery along the US West Coast, and now includes our first operation in Australia. Our focus is on permanent crops, specifically citrus, blueberries, and hazelnuts. The configuration and expertise of our teams in our corporate offices in Portland, Oregon, and San Francisco, California, enables a highly aligned and engaged relationship with our operating teams that is rooted in leading-edge innovation and impact.

We believe our hands-on approach to the management of our funds is core to our ability to drive the results we and our stakeholders expect.



## 2 Making an Impact Together

This report is a regular update on our ongoing efforts to generate positive impact in every aspect of our business. But as we have suggested before, we are not seeking to be successful in our business so that we can support causes or initiatives that have impact. Our goal is to enlist the support of our teams in identifying opportunities that have real environmental or social impact that contributes to the economic performance we are seeking to achieve. The mandate that motivates us is the belief that our financial performance can be better than comparable funds that do not consider impact, a thesis that provides us with analytical discipline and leads to continual, healthy debate.

We relish the fact that we are involved in agricultural businesses with deep and proud histories. The long experience of our teams gives us confidence in our ability to execute. At the same time, we actively seek to help create new realities in our crop categories, both to strengthen a bond with consumers and to ensure continued excitement and interest in the crops we grow. That requires that we engage openly in global conversations about the common good. In 2017, we proudly signed the United Nations Principles for Responsible Investment and have worked hard to build relationships to that growing community. Next year, we will publish the first report associated with that commitment. UNPRI aligns with the 17 United Nations Sustainable Development Goals, four (at right) of which are directly relevant to our business.

### AC'S PROGRESS TOWARD THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS



Where possible, we donate nutritious fruits and nuts to combat hunger in the communities where we work.



We bring new economic life to farms and agricultural facilities, supporting job stability that drives community economic vitality.



We implement regenerative agricultural practices toward a goal of reducing the carbon footprint of our farms.



We restore native habitat to provide a home for native pollinators and birds.



### BUILDING A REGENERATIVE FOOD COALITION

At Agriculture Capital, our team shares the view that collaboration is a critical aspect of creating impact. In last year's impact report, we framed what we considered to a practical model for building a regenerative food system in permanent crops. As that model begins to take shape, we are continually reminded of how much our work depends on many unique networks and collaborations.



We believe we can be a nexus for many different stakeholders seeking to influence the future of food. Most would agree that this is a remarkable time in food. The need for healthy food at a global scale is profound. The opportunity to bring innovation to that process has inspired countless entrepreneurs to design approaches to mobilizing data, using new technology, and establishing unlikely coalitions to improve the efficiency of food production and to transform the experience of enjoying food.

We have learned we need all kinds of collaborators to achieve our goals, and we have focused on building a culture where openness to engaging with stakeholders of all kinds—business partners, academic institutions, not-forprofit community-based organizations, entrepreneurial ventures, and multi-faceted networks—is what creates pathways to opportunity. These kinds of collaborations foster employee excitement, neighborly goodwill, and business results.

A truly regenerative food system is still in its nascent stages and to achieve it will require rethinking the way different components of the system work together. We are actively encouraging and modeling for our teams what it means to lead this change.

## A FAMILY OF BUSINESSES

Our efforts to integrate a focus on impact into our business begins when we first consider an investment, and our team is continually strengthening its commitment to making regenerative management planning an integral part of all of our more traditional investment and budgeting processes.

When evaluating a new farm or facility asset for acquisition, we strive to send a signal that we are both purpose and data driven and will not only be gathering information that may not have historically been collected but also seeking to instill an operational ethic that challenges the status quo. Our goal is to align opportunities for cost efficiencies with decisions that create value in the way they conserve resources, support employees, and forge consumer relationships. Too often in global food systems, there has been a separation of these different interests. Our model is predicated on the idea that if we connect them and build a common language around them for all stakeholders, our businesses will have enhanced value and long-term continuity. Ultimately, we will evaluate ourselves by having the positive impact we create far exceed the alternative.

Our owner-operator investment model is driven by the value that we add to our assets through mission-driven oversight. The value we bring in strategic guidance and direction across our business is paired with the energy

#### **CROSS-FUNCTIONAL THINKING**



that our operations teams bring to making our farms and facilities all they can be. We recruit our leaders and future leaders with that balance in mind. Each business we welcome into the AC family presents new opportunities to strengthen our whole team. We take pride in empowering every business in the Agriculture Capital family to realize their most innovative ideas and goals.

## CULTIVATING THE AC WAY

We consider the diverse experiences and perspectives of people across our organization to be an extraordinary source of creativity that can drive results for our businesses. Those experiences have led to improved efficiencies, increased productivity, and safer and more responsible operations. Our focus is to empower our teams—in geographies they understand best, in operations they steward every day—to make the most thoughtful decisions they can make, rooted in the solid foundation of our mission and core values. We recruit with intention to assemble teams that are best equipped to represent our purpose.

## THE OBJECTIVE OF "THE AC WAY" IS THREEFOLD:

- To engage and motivate our operational teams to contribute actively to our shared mission and purpose
- To provide clarity and consistency across our businesses to enable the sharing of best practices and support collective solutions
- To empower our teams to bring local creativity to our efforts to create positive impact in the context of a common management system



That said, we have recognized that this effort is inherently collaborative. That is why we utilize a process and framework that we call "The AC Way" to align leadership and risk management on environmental, social, and governance factors with business performance.

The core management factors within the AC Way have been compiled from our evaluation of existing industry performance standards that encapsulate a broad range of actions that cover material aspects of our operations. The framework includes standards in areas as far-reaching as workplace quality, pest control, water stewardship, waste handling and recovery, chemical management, packaging, landscape ecology and habitat quality, energy efficiency, and climate protection.



The AC Way is a tiered system, designed to drive improved performance over time. Our expectation is that every asset investment we pursue meets a baseline Tier 1, or first stage, performance. That minimum expectation provides assurance across a discrete set of core business indicators that our ability to optimize the asset for efficiency and impact is achievable.

From there we work closely with our asset managers to drive performance toward Tier 5, which we believe would differentiate our assets significantly from others in the marketplace. In some cases, that high-level performance focuses on improving or refining operational procedures. In other cases, it involves transformative step changes. In all cases, this program is aligned with our operational planning, progress assessment, and budgeting.

As the program expands, we intend to use it as a goal-setting framework for our asset managers and for our business as a whole. We also expect to further adapt it to capture evolving factors of particular interest to us in our efforts to make our regenerative management efforts increasingly concrete.



In the future, we are focused on making The AC Way work for our operational teams. One way we hope to do that is to utilize communications tools to enable managers to build support networks founded on their unique expertise, priorities, and capacity.



As depicted in this conceptual graphic, we manage our investments to the thesis that true, long-term value is created through the alignment of risk-adjusted financial performance (for example, revenue or yield) with everimproving management around ESG (environmental, social, and governance) factors that directly or indirectly affect the business through employee satisfaction, retention, and growth; better and more strategic customer and consumer relationships; and more effective risk management. Agriculture Capital actively considers critical areas of business and societal concern through a unified risk-responsibility-returns lens oriented toward long-term leadership.

MANAGING RISK						
Category	Risk	Responsibility	Returns			
Greenhouse Gas Emissions	Agriculture is a significant contributor to greenhouse gas emissions, exposing the industry to regulatory risk. Monitoring and controlling agricultural emissions sources poses a special challenge due to the complexity of these sources, which include chemical applications and soil and biomass carbon stock changes.	Advance regenerative agricultural management to reduce climate impacts. Optimize nutrient applications and carefully steward soil and biomass carbon stocks.	Decreased exposure to regulatory risk with potential to benefit from future carbon pricing schemes.			
Energy & Fuel Management	Irrigation, packing operations, and vehicles require substantial quantities of energy. Reliance on fossil fuels increases exposure to energy price volatility.	Improve the energy intensity of our business. Upgrade to energy-efficient irrigation, lighting, and refrigeration systems, and evaluate opportunities in solar.	Energy cost stabilization and overall cost reduction.			
Water Management	Persistent drought conditions, uncertain future availability and volatile water pricing presents risk to operational growth and success.	Contribute to long-term watershed and groundwater health in basins where scarcity has real economic, environmental, and social impacts. Measure water use and invest in technology such as drip irrigation and moisture sensors; leverage scale of operations to allocate water efficiently among assets.	Long-term availability of essential input. Improved water and nutrient cost management, and yield improvements.			
Chemical Responsibility	Health of consumers, workers, environment; regulatory compliance	Ensure highly effective chemical use where needed, aligned with cost- effective purchasing strategies and the leading edge of greener chemistry. <i>Measure chemical use and actively manage chemical inventories to support</i> <i>cost savings and industry best practices.</i>	Efficient operations and consumer trust and wellbeing.			
Food Safety	In a complex global food system, food safety concerns can quickly spread far from their source.	Provide a healthy and safe food supply. Invest in state-of-the-art processing and traceability capabilities. Grow consumer interest in healthy, nutrient-dense fruits and nuts.	Consumer trust and wellbeing.			
Workforce Health & Safety	Specialty crops are labor-intensive and require physically-demanding work. A competitive labor market presents challenges for workforce recruitment and retention.	Work with employees to provide a safe and supportive work environment. Create long-term, stable, year-round employment and opportunities for career advancement and leadership; guarantee equal opportunities and create a culture of support and communication.	Effective teams and inspired leadership.			
Impacts of Climate Change	Global climate change disrupts regional weather and temperature patterns, impacts water systems, and threatens pollinators and other species of agricultural importance.	Lead climate adaptation and mitigation in the permanent crops sector. Protect and restore habitat and native species diversity. Diversify across locations and crop types; evaluate climate risk in due diligence process.	Long-term productivity of permanent crops. Enhanced ecosystem functions and higher yields.			

## **3** Producing Healthier Food

## THE VALUE OF NUTRITIOUS FOOD

For a company focused on the production of food, Agriculture Capital's explicit focus on healthy whole foods of the highest quality is an integral part of our impact. As our business grows, so does our ability to deliver safe and nutritious food to the delight of consumers.



For Agriculture Capital, healthy food means better nutrition, exceptional quality, and superior food safety.

According to the USDA Dietary Guidelines, fruit and vegetables should fill half of a healthy plate,<sup>1</sup> but most Americans today are not eating enough to ensure optimal nutrition. Only 13 percent of adults meet daily fruit intake recommendations,<sup>2</sup> and about half of all adults have one or more preventable, diet-related chronic diseases, including cardiovascular disease, Type 2 diabetes, and overweight and obesity.<sup>3</sup>

At Agriculture Capital, we seek to advance healthy eating by contributing to the supply of high-quality, nutrient-dense fruits and nuts, and we have focused on producing crops that are not only in high consumer demand but also have essential attributes that make them an asset to every diet. We hope that our focus on food quality and crop varietals that have strong flavor profiles will help more and more people transition to more healthful diets. Our teams are driven to nourish people, and helping people be more healthy inspires us every day.

## **OUR CROPS**

The impact of the crops we grow on the health of the people who eat them is as important as anything we do. We're proud to have produced millions of servings of nutrient-packed foods this year.

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**BLUEBERRIES** 

11 million serving

Vitamin K <sup>a</sup>	36%DV
Manganese	25%DV
Vitamin C°	24%DV
<b>Dietary Fiber</b> <sup>d</sup>	14%DV
<b>Anthocyanidins</b> <sup>e</sup>	

**HAZELNUTS** 2 million servings



Manganese	78%DV
Copper <sup>g</sup>	25%DV
Vitamin E <sup>h</sup>	21%DV
Magnesium	12%DV
Dietary Fiber <sup>i</sup>	11%DV

**CITRUS** 315 million servings



Vitamin C <sup>k</sup>	152%DV
Folate	13%DV
<b>Dietary Fiber</b> <sup>m</sup>	14%DV
Potassium	7%DV
<b>Hesperidin</b> °	

- a. supports normal blood clotting and bone and tissue health. <u>https://medlineplus.gov/vitamink.html</u>
- b. essential nutrient that supports metabolism. <u>https://medlineplus.gov/druginfo/natural/182.html</u>
- c. antioxidant that helps heal wounds, aids in iron absorption, and assists in cartilage, bone, and tooth repair. https://medlineplus.gov/ency/article/002404.htm
- d. helps control weight. <u>https://medlineplus.gov/dietaryfiber.html</u>

e. a flavonoid, polyphenol, and antioxidant.

- https://www.ars.usda.gov/ARSUserFiles/80400525/Dat a/Flav/Flav\_R03-1.pdf
- f. essential nutrient that supports metabolism. <u>https://medlineplus.gov/druginfo/natural/182.html</u>
- g. essential trace mineral that helps keep helps keep the circulatory system, nerves, immune system, and bones healthy. <u>https://medlineplus.gov/ency/article/002419.htm</u>
- h. antioxidant that supports immune system and metabolic processes. <u>https://medlineplus.gov/vitamine.html</u>

- i. essential nutrient needed for more than 300 biochemical reactions in the body. <u>https://medlineplus.gov/ency/article/002423.htm</u>
- j. helps control weight. <u>https://medlineplus.gov/dietaryfiber.html</u>
- antioxidant that helps heal wounds, aids in iron absorption, and assists in cartilage, bone, and tooth repair. https://medlineplus.gov/ency/article/002404.htm
- I. helps the body make new cells. Especially important during pregnancy. https://medlineplus.gov/folicacid.html
- m. helps control weight. <u>https://medlineplus.gov/dietaryfiber.html</u>
- n. electrolyte that aids muscle function and heartbeat regularity. <u>https://medlineplus.gov/potassium.html</u>
- <u>https://www.ncbi.nlm.nih.gov/pubmed/21068346</u> "Hesperidin [a flavonoid and polyphenol in oranges], a plant nutrient found in oranges and orange juice, may help maintain healthy blood pressure and blood vessel function"

## BUILDING BRANDS WITH PURPOSE

As Agriculture Capital continues to progress toward building synergistic, vertically integrated food systems around our core crops, we are unifying our operations around a concept we refer to as AC Foods. Our evolving definition of AC Foods has created opportunities for us to align our marketing and sales strategies around the same mission and values established at Agriculture Capital. Bringing our positive impact efforts to life in our communications with investors and key stakeholders, and now telling those stories to our customers and consumers is the heart and soul of producing food that delights an increasingly discerning and engaged marketplace.

We are in the midst of a dynamic process to determine how our products will be shared with consumer over time. In the meantime, we are working with our teams and marketing partners to tell the AC Foods story and establish what will be a growing presence in the market. The Sumo Citrus® brand is a flagship of our business, and it has the potential to be become one of the most well-known and beloved fruit brands due to its flavor, size, and easy-peel characteristics. With Sumo Citrus® – and other citrus brands we manage, we have invited consumers seeking healthy food alternatives to experience the investments we have to align product quality with consumer expectations around food safety and sustainability. Fresh fruits and nuts have been core to our business since we started, and we are invigorated to see the continuing relevance and growth of these categories.

We insist that conscious marketing and product delivery can lead to consumer wellbeing. That is why we invest in promoting whole fruits and nuts and take every effort to provide the highest value products to the marketplace. Our state-of-the-art packing facilities allow us to ensure that our fruits are consistently delicious, and careful handling of products across the value chains helps us optimize shelf life for the consumer, in turn reducing food waste, which adversely affects the food system and has been shown to be a source of significant climate impacts, inefficient resource use, and nutrition loss.

As the AC Foods family of products expands, we will continue to seek opportunities rooted in our core value of transparency to deliver product and production attributes to consumers that will lead to long-term business results and support the growing market for healthy food.



Several of these brands are asociated with an asset pruchased in 2018 and otherwise not addressed in this 2017 report.

## FOOD SAFETY

Nothing less than industry-best food safety is our priority every day, in every aspect of our operations.

Food safety has vast implications on the positive impact we seek to deliver, not only in ensuring the wellbeing of our consumers but also ensuring that products that have required water, energy, and human resources throughout their life cycles are not wasted. We know that proactive investment in safety and sanitation is a non-negotiable obligation to customers and employees and an essential part of earning their trust. We manage our business to exceed regulated requirements of the United States Food Safety Modernization Act by insisting on a "beyond compliance" mandate throughout our operations.

Third-party certification constitutes part of our promise to deliver best-in-class food safety. Our citrus packing facilities have earned **Global Food Safety Initiative** certification and conform with the **Produce Traceability Initiative**. Food safety procedures at these facilities include twiceyearly traceability exercises, monthly employee trainings, and hourly water sanitizer level testing. State-of-the-art traceability systems allow us to track produce anywhere in our process within an hour for a nimble and adept response to any food safety challenge. On the farms, our professional management teams adhere to strict safety protocols which encompass farm inputs, employee hygiene, product transport, and recordkeeping. All of our operations are certified in accordance with **GLOBALG.A.P.** standards governing food and employee safety.



## **4** Growing Access & Scale

Among the pillars that formed the basis for Agriculture Capital's first foray into the marketplace was the notion that appropriate scale could create value at all levels of the food system.

Although the idea of producing food in a decentralized way enables people to get involved in food production in a wide variety of ways close to where they live, it is ultimately inefficient in expanding access to healthier food for people for whom local or personal food production is unrealistic. In order to meet the needs of a growing global population of people and families seeking better food, it is essential that responsible production of food occur at a scale where efficiencies can be realized.

We manage our farms and midstream facilities with particular attention to ensuring full utilization of facility space and farmable acreage, equipment, and other infrastructure to optimize unit economics and resources across our business. As our business expands, we expect our ability to introduce purchasing efficiencies into our operation to help us further leverage the benefits of scale. Among the operational innovations that we have been able to deploy as a function of our scale and production volumes include automated harvesting and sorting technology.

We believe a critical role we play is as a good and supportive neighbor to farms and operations of all sizes. This even applies to our own efforts to support edible gardens for our employees within some of our locations. We seek opportunities to support the needs of adjacent or nearby farming operations and are hopeful that our ability to modernize our particular operations can have long-term implications for our producers and for our industries as a whole. Ultimately, our ability to provide broader access to tools that others may not be able to access—or may not need to own—themselves is good for our business, our communities, and the planet in the form of a lighter footprint.



The ultimate goal of farming is not the growing of crops, but the cultivation and perfection of human beings.

A STANDARD TO THE ASSA

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—Masanobu Fukuoka, The One-Straw Revolution

ABF 09

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### COMMITMENT TO ORGANIC

In under two decades since the implementation of the National Organic Standards, USDA Organic has been the catalyst for incredible changes in the food system. What started as a pioneering idea has now grown into a \$50 billion<sup>4</sup> sector that supports real changes in agricultural management, helping limit synthetic nutrient use, improve soil management, and reduce pesticide exposure for farmers and consumers alike.

We support the National Organic Program because it communicates transparency and helps provide stable markets that incentive ecological practices.

Organic wields the force of the law and has stood the test of time. Moreover, it offers a democratic forum for stakeholders to advance a shared vision of sustainable agriculture.

Agriculture Capital aims to employ a regenerative mindset across all of its practices—including on conventional farms—and we see the National Organic Program as a vital component of regenerative production, not only for the standards it enforces but also because of its full programmatic benefits.

#### ACROSS ALL OUR OPERATIONS, WE STRIVE, WHEREVER POSSIBLE, TO:

- Convert to organic production. We currently manage approximately 2,500 acres that are certified, actively in transition or under evaluation for transition. We are committed to working through barriers that exist in certain crops and in certain export contexts to create increasingly viable opportunities for organic food. This requires careful attention to pest pressure and susceptibility—including an openness to innovation and research—to work continually to ensure a highly effective but safe agronomic toolkit.
- Contribute to the growth of the industry by being active participants in industry associations to strengthen organic standards, expand the organic marketplace, and bring attention to the importance of organic agriculture as a land management philosophy rooted in soil management and responsible land use.
- Reduce our use of crop protectants and other chemicals through organic production, weed matting, innovative research trials, integrated pest management, and precision electrostatic spray techniques.

## COMMUNITY ACCESS

Around one in eight American households experience food insecurity at some point during the year,<sup>5</sup> and a number of our farms and facilities are located near or in areas that the USDA designates as low income and low food access.

We are committed to supporting community hunger programs in the regions where we work and are actively working to develop sustained programs that infuse our approach to regenerative food production with food security for the people who need it most. In particular, we are conscious of how food waste and inadequate community food access are problems that have synergistic solutions.

In 2017, we partnered with Salem Harvest in Oregon to welcome gleaners to our fields. Through their efforts, approximately 2,500 pounds of blueberries and hazelnuts we were not able to harvest for a variety of reasons were donated to organizations that provide fresh food to people in need. Our packing facilities have donated over tens of thousands of pounds of fruit to food banks and other food access programs each year and have been purposeful in supporting nutritional relief in response to natural disasters like Hurricane Harvey, which ravaged Texas last August. At Agriculture Capital, we recognize that supplying healthy food is only one part of increasing food access.



## **5** Responsible Production

### We seek to infuse all of our operations with a mindset toward regenerative outcomes.

Our aim is to renew and restore resources that our businesses rely upon, as we are committed to long-term ability of those businesses to produce nutrition and economic opportunity for generations to come. Central to our sustainability efforts is the recognition that more efficient management of inputs not only helps to reduce environmental and employee impact but also contributes to keeping operating expenses under control.

We are committed to a process of continual improvement in our business with a particular focus on the following areas:

 Reducing our impact on the climate system via carbon sequestration in soil and permanent-crop plant material; efficient use of inputs, strategic analysis of renewable energy use opportunities focused on optimal portfolio deployment; critical evaluation of innovation potential in primary and secondary packaging; reduction of food and other organic waste through composting, gleaning partnerships, and other zero waste efforts; and reuse and recycling programs that save money and improve productivity.

- Industry-leading water stewardship, accomplished where appropriate—through high-efficiency irrigation systems, strategic on-farm water storage and conveyance; recirculation in processing; natural stormwater management; innovative soil moisture and evapotranspiration monitoring; and active evaluation of groundwater recharge potential.
- **Chemical** responsibility, including minimizing use through weed management and advanced spray equipment; integrated pest management; and active cross-functional assessment of risk implications of chemical selections for different functions.
- Waste management, including material reuse and recovery initiatives across our business, as well as zero-waste facility management goals.
- Biodiversity and habitat protection strategies that contribute to ecosystem services including flood mitigation, bank stabilization, water retention, nutrient transport, and pest management; that improve native pollinator viability that can provide crop benefits and cost reductions; and that facilitate strategic raptor activity that supports rodent and invasive bird control.

We're only truly secure when we can look out our kitchen window and see our food growing and our friends working nearby.

> -Bill Mollison, the father of permaculture

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## MEASURING OUR CLIMATE IMPACT

Our work is undertaken with a mindfulness of the important role agriculture must play in addressing climate change.

The food system contributes an estimated 19%–29% of anthropogenic greenhouse gas emissions, both globally and in the U.S.<sup>6</sup> Agriculture is a heavy emitter, yet agriculture is unique among industries because of its potential to draw carbon out of the atmosphere. We believe that regenerative food production can have a net positive effect on climate change, and as such we are focused on business practices that measure and manage our energy use, minimize our greenhouse gas (GHG) contribution, and accelerate the shift to renewables and innovative energy management technology.

This year, we are pleased to share a preliminary inventory of our greenhouse gas emissions operations, the result of our sustainability data collection efforts across the business. Our greenhouse gas inventory allows us to locate cost-effective reduction strategies, move toward emissions pricing, and prepare for regulatory interventions and carbon credit opportunities. (Modeling our California carbon footprint is ongoing and will be shared in subsequent reporting.) Based on the Agricultural Guidance from the Greenhouse Gas Protocol—a framework for quantifying climate impact, our emissions are divided into different "scopes" and assessed within the boundary of areas where we have operational control. We have used the Cool Farm Tool—a globally recognized calculator—to model our farm emissions. The EPA Center for Corporate Climate Leadership and the USDA COMET-Energy tool provide emissions factors for our off-farm sources. Although we have not yet sought external audits of our calculations, these figures represent our good faith efforts at conservatively reporting on our emissions based on the best available models and data.

Columbia Spotted Frog in Humbug Farm border habitat, June 2017. (Photo credit: Hannah Curry)



Direct fugitive emissions (gases that leak from industrial equipment) from refrigerants can be an important factor for operations with substantial cold storage capacity, but our state-of-the-art packing facilities feature efficient ammonia refrigeration systems. Since ammonia has zero ozone depletion potential and zero global warming potential, our refrigeration systems do not release fugitive emissions.

Two of our Pacific Northwest farms are net sinks of carbon. The Cool Farm Tool model indicates that carbon stocks on these farms sequester over one metric ton of CO<sub>2</sub> per acre annually due to the beneficial tillage and cover cropping practices on these farms. Conversion from annual crops to no-till permanent crops has helped minimize soil disturbances and build soil organic carbon on these properties. Our cover crop plantings of clover and perennial grasses also contribute substantially to carbon stocks by increasing biomass production and protecting soil health.

Finally, woody biomass accumulation in our crops represents a significant carbon sink. The estimated annual biomass production of our crops far exceeds our total  $CO_2$  equivalent emissions. However, since the emissions impact of this stock depends on its long-term fate and the method of accounting, in the interest of conservative reporting, we omit woody biomass from our total fundlevel emissions and offer further discussion below.

PROJECTED CARBON FOOTPRINT	Annual CO2-equivalent (metric tonnes)
Direct greenhouse gas emissions (Scope 1)	
Nutrient Emissions	1,108
Pesticide Emissions	496
On-Farm Fuel	2,564
Refrigeration	-
Utility greenhouse gas emissions (Scope 2)	
On-Farm Electricity	1,544
Packing House Electricity	2,308
Indirect greenhouse gas emissions (Scope 3)	
Fertilizer Production	1,876
Company Travel	147
Carbon sequestration	
Soil Carbon Stock Changes	(3,668)
Total Portfolio through 2017	6,374

ESTIMATED ADDITIONAL CARBON SEQUESTRATION (not included in above footprint)	
Plant Biomass Production	(39,694)

## OUR STRATEGIES FOR CLIMATE-SMART FOOD PRODUCTION

## We're committed to making use of every available tool for climate smart agriculture.



#### SOLAR

High-efficiency solar not only reduces climate impact, it also generates a net contribution to financial returns and protects businesses from energy price volatility. We continue to make progress on our efforts to break ground on our first portfolio solar project, although dynamics in the solar industry and within the political environment have made that a more deliberative process. We continue to work in earnest on an approximately two-megawatt solar array for one of our fruit packing facilities, and are actively evaluating plans for other timely deployments.

#### **ENERGY EFFICIENCY**

In the meantime, we continue to take advantage of energy efficiency efforts that support optimal solar system functionality, including high-efficiency LED lighting systems, usage sensors, and energy monitoring that have already driven energy demand and costs down. We have engaged with the Energy Trust of Oregon on two specific energy efficiency upgrades for which we received nearly \$15,000 in incentive funds. The first was a purchase of three variable frequency drives (VFD) on farmland irrigation pumps. The second involved the update of interior and exterior lighting with LED equipment, similar to work we had previously completed in California. Annual energy savings from the pump VFD project alone is equivalent to the average annual energy needs for three Oregon homes.

Also in 2017, we worked with Bonneville Environmental Foundation to offset all of the emissions during the start-up of our packing facility in Oregon. We purchased over 240,000 kWh equivalent renewable energy certificates, which represent the environmental benefits of wind farms. In addition, we purchased over 300 metric tons of carbon offsets, which support mitigation projects including the development of a 24,000-acre redwood and fir forest along the Garcia River in California. We believe strongly that offset and REC purchases are not long-term strategies and do not replace our focus on reducing the direct climate impact of our facilities and farms, but we recognize—as in this particular case—that they can be helpful tools in isolated scenarios, especially when the result of one-off investments protects healthy forests and supports the growth of markets for renewables.

#### BIOMASS: THE CLIMATE PROTECTION POTENTIAL OF TREE CROPS

Trees and healthy forests are essential in combatting climate change. The soil-the foundation of our agricultural systems-was developed and maintained under forests and perennial grasslands, and these ecosystems are our model for restoring agricultural sustainability. Trees also store a tremendous amount of carbon in their woody biomass, which is why a number of the most promising solutions to climate change-silvopasture, tropical staple trees, and tree intercropping-involve integrating trees into other agricultural systems. Conversion from annual cropland to orchards sequesters 1.4 tons of carbon per acre per year on average, according to Intergovernmental Panel on Climate Change estimates. Our perennial crops sequester an estimated 40,000 tons CO<sub>2</sub> annually—more than the emissions of 2,400 U.S. residents—so we feel a real responsibility to ensure the long-term management of this stock.

ANNUAL BIOMASS PRODUCTION					
CITRUS	BLUEBERRIES	HAZELNUTS			
5.9 t CO <sub>2</sub> /ac	6.3 t CO <sub>2</sub> /ac	7.0 t CO <sub>2</sub> /ac <sup>8</sup>			

Estimated non-fruit carbon sequestration potential

ANNUAL BLOMACC BRODUCTION

#### FOOD WASTE AND OTHER WASTE MANAGEMENT

According to a 2016 report from ReFED (Rethinking Food Waste through Economics and Data), the US food system spends approximately \$218 billion annually managing value chains for over 60 million tons of food that are never consumed. When you consider operational activities that occur across those value chains that contribute to the emission of greenhouse gases, the impact of food waste-and other waste generation-on climate change is profound. In our citrus and blueberry businesses, we work diligently to ensure that as little food waste as possible is created by developing a variety of different end uses-sometimes revenue generating-for fruit of all grades. This includes donations to support hunger programs (as previously noted), animal feed, and composting. We are continually evaluating opportunities to further optimize those outlets. With the support of our farm managers, we have also developed research trials to use shell byproduct from our hazelnut operation for weed control in challenging contexts.

Our commitment to operating zero-waste facilities led to creativity and purpose from our teams. Our nursery operations capture triwall cardboard from various uses across our whole business and reuse that cardboard to ship new tree stock. Not only does this keep valuable cardboard out of the southern California waste stream, but it excites our teams and provides some productivity benefits. Similarly, our recovery of packaging materials that cannot be used for our purposes helps support area food bank packaging needs.

### WATER STEWARDSHIP

The implementation of California's Sustainable Groundwater Management Act (SGMA) sustainability plans in 2020 will bring about profound changes in California's agricultural landscape. 127 of California's 515 groundwater basins are medium or high priority basins which require overdraft protections under SGMA, and these areas represent 96 percent of state groundwater pumping.<sup>9</sup> Four million acres of California farmland rely on groundwater for irrigation.<sup>10</sup>

We concur with projections suggesting that sustainable groundwater management will necessitate changes in crop types and planted acres. Our team continues to run active scenario analyses. The economics of current crop profitability and crop water demand figures suggest that high-value perennial crops—like those in AC's portfolio will continue to be farmed under sustainable groundwater management plans in regions where we operate. In other words, as groundwater is regulated and becomes more costly, lower value crops will likely become less viable. For annual crops and certain perennials with low or lower values, fallowing or land transactions could occur.

This will likely provide opportunities to expand the economic and ecological benefits of permanent crops like citrus, berries, and grapes. It will also present opportunities to mitigate the impacts of fallowing on ecological quality and natural resources. The table to the right illustrates a number of different crops grown in California

CROP	Acre-ft. water per acre	Food tons per acre-ft. water
Urban	2.0	0.0
Bush Berries (incl. Blueberries)	2.5	3.5
Cherries	2.5	1.6
Grapes - High Value	3.5	4.2
Citrus - High Value	2.5	6.3
Walnuts	3.0	0.9
Pistachios	4.0	0.4
Citrus - Low Value	2.5	6.3
Grapes - Medium Value	3.5	3.7
Plums, Prunes, Apricots	4.0	3.2
Pomegranates	3.3	1.7
Almonds	5.0	0.3
Melons, Squash, Cucumbers	4.8	2.5
Kiwis	4.0	1.8
Olives	4.0	1.3
Grapes - Low Value	3.5	3.2
Alfalfa and Misc Grasses	4.5	2.7
Mixed Pasture	4.5	1.2
Flowers, Nursery	2.5	0.3
Potatoes, Sweet Potatoes	1.7	15.9
Wheat	0.5	6.6
Corn, Sorghum, Sudan	2.5	2.4
Beans	2.3	0.6
Cotton	2.5	0.3

regions relevant to our operations and includes our core California crops. In addition to showing typical water demand of these crops (drawn from most recent University of California Cooperative Extension cost studies), it also presents estimated yield (in tons) per acre foot of water (equal to 325,851 gallons of water, or a foot deep of water spread out over a full acre). Not only are we cautiously optimistic about how the consumer value of our crops will help to secure our water needs over time, but the favorable yield of our crops in terms of water efficiency—and even the ability of our crops to deliver hydration to consumers—is a reassuring marker of the expectations we have for ourselves in terms of stewardship.

Given our presence in California as a grower, we are especially attuned to the threat of water scarcity and feel an obligation to lead the food and agricultural community in developing water-smart practices for responsible water stewardship.

In addition to entity-level water stewardship, as investment managers, we have a special opportunity to manage water risk through an integrated fund-level strategy. We are keenly aware of the risks associated with farming in areas designated as high-priority under California's SGMA, which constitute the majority of our total acreage in the state. Yet as a vertically-integrated, diversified farming business, we feel well positioned to proactively steward water as SGMA comes into effect. And while SGMA and the water scenario in California is an issue of global focus, water is a precious resource, as well, in seasonally dry areas where we grow in Oregon and Australia, so our water ethic is far-reaching.

Our water management begins with comprehensive water availability and pricing analyses during our due diligence process, in which we engage multiple third parties. From there, we are able to evaluate opportunities to allocate water among our properties, strategically fallow and plant, purchase water rights, and contribute to storage and recharge, not to mention deploy water-saving high-efficiency drip and micro irrigation wherever we farm. Water management is one outstanding area where largescale, highly professional agricultural systems can deliver substantial efficiencies.



## SOIL HEALTH

Across our business, we are fundamentally farmers of the soil. Without a keen eye toward conserving and enhancing the health of our soil, we could lose the key component of healthy food.

Through erosion and other degradation, fertile soil is being lost at an extraordinary rate across the globe. Coupled with our need to feed upwards of nine billion people by mid-century, this stands as the food system's greatest priority. We place soil health—and responsible land management—at the core of our regenerative philosophy. The health of our crops and the health of our soils are inextricably linked.

## ACROSS ALL OUR FARMS AND FACILITIES, WE CONTINUE TO:

- Measure and monitor applied nutrients, organic matter and carbon to assess soil health.
- Utilize cover cropping, composting, and weed matting to promote nutrient cycling and water retention, reduce chemical use, and maximize organic matter.
- Convert to organic, where prudent, to support soil carbon sequestration.

Soil is not a passive substrate for our crops, but a living and dynamic organism. We see the importance of living soil in areas like the symbiotic relationship between blueberries and ericoid mycorrhizal fungi. Since blueberries have a very shallow root system, they depend on beneficial fungi for optimal uptake of nutrients like nitrogen, phosphorus, and iron.<sup>11</sup> The fungi colonize the root system and greatly increase the effective area of the root system as they exchange nutrients with the blueberry plant. Ericoid mycorrhizal fungi prefer organic fertilizer to conventional nitrogen fertilizer, which is just one reason why we work to convert to organic to support healthy soils.<sup>12</sup>

### HABITAT & BIODIVERSITY

Stewardship is not only one of our core values at Agriculture Capital; it is also core to the responsibility we feel for the landscapes and ecosystems that make agriculture itself possible. Agriculture fundamentally relies upon natural systems.

Unfortunately, across the world and across the regions where we operate, many agriculture landscapes do not exist in balance with areas of high ecologically quality and value. And as a result of that imbalance, farms have become dependent upon interventions that may not have been necessary with better functioning systems.

For that reason, the restoration and renewal of native wildlife habitat and biodiversity is a business imperative for us, as well as a passion. As you walk through our rows of blueberries along the Willamette River, you will likely see the raptors that frequent or inhabit our farms. Predatory birds are excellent hunters of rodents and insects—not to mention invasive bird species—and serve an important function in our integrated pest management strategy. More than that, as apex predators and indicator species, they convey information about the health of the ecosystem throughout the food chain. On our farms we look for them as indicators of ecological management.

Wildlife advocates—like Oregon's Cascades Raptor Center—have helped us design perch and nesting locations for owls, hawks, and ospreys on our farms. These features help make our farms a good home for raptors



Left: Bombus vosnesenski in Halls Ferry Farm hedgerow, August 2017. Right: Lacewing in Humbug Farm hedgerow, July 2017. (Photo credits: Hannah Curry)

such as kestrels rehabilitated by the Raptor Center and released on and around our farms. As raptors continue to face threats from encroaching human society, we see an important role for farms to support their critical contributions to ecosystem balance.

Similarly, we have implemented and continue to expand our native pollinator and beneficial insect optimization efforts by cultivating native plant hedgerows, meadows and restored riparian areas. Building habitat for pollinators requires careful attention to detail and a degree of artistry to select plants that bloom at the right times, a process we've undertaken in partnership with the Xerces Society. Our initial interest in pollinator habitat restoration emerged out of a near-perfect alignment—supported by academic research—of our management around risk, responsibility, and returns. We continue to gather evidence to validate a research thesis that native pollinator activity has the potential to boost harvests, while reducing farming expenses incurred because of the need for contract pollinator services and contributing to overall ecosystem health. Field technicians have identified at least six different species of native pollinators (we believe we will eventually attract as many as 20 unique species) on our blueberry farms in addition to numerous beneficial pred-



We are pleased that the Oregon **Bee Project** -a partnership between the Oregon Department of Agriculture, **Oregon State** University, and the Oregon **Department of Forestry named** our Halls Ferry Farm one of its flagship farms earlier this year. ators. We also measured how proximity to hedgerows affects pollinator abundance. At the beginning of the season, during the blueberry bloom window, field research has shown a statistically significant increase in the number of pollinators in fields closest to hedgerows. These data offer early encouragement that our hedgerows are achieving their intended promise.

We remain optimistic that greater native bumblebee activity will ultimately support higher crop yield without the risk of using expensive (sometimes to the tune of \$900 per acre in scenarios with multiple crops) imported honeybees that are not only globally susceptible to colony collapse disorder



Left: Bombus vosnesenski in Halls Ferry Farm hedgerow, July 2017 (Photo credit: Hannah Curry). Right: Honeybee.

but also less hardy and less well-suited to the coastal climate or particular microclimates where we operate. Our work which began in the Northwest is expanding into California in 2018 with the support of unique and emerging partnerships with public agencies that have also become extremely motivated by this work.

Native pollinators create \$29 billion in US crop value and over \$500 billion globally. Through our small efforts, we hope to serve as a catalyst to increase this value, reduce our reliance on imported pollination services, and increase the resilience of our own acreage and surrounding ecosystems.

#### **MEASURING THE IMPACT OF POLLINATOR HEDGEROWS**



Blueberry Field Proximity to Hedgerow Effects, Pollinators

#### Valuable ecosystem services supported by functioning habitat

To understand the impact of our burgeoning efforts to bring back crop-supporting native pollinator activity to our blueberry farms, we are developing a growing understanding of yield impacts that we hope to share in full in the future. In the meantime, data gathered directly from our farms shows a statistically significant increase in native pollinator activity on crops closest to restored habitat areas during the all-important blueberry bloom window at the start of the growing season. These data offer early encouragement that habitat investments are benefitting ecosystem function and our bottom line.

### EMPLOYEES ARE OUR KEY PARTNERS

Our people make everything we do possible. Each time we introduce our EATS values to new and growing teams across our business, those values are embraced and brought to life by dedicated individuals who have been drawn to Agriculture Capital's mission. Their dedication to outstanding performance, innovative problem-solving, and communication helps us achieve our mission of growing access to better, healthier food.

As we celebrate the work of our employees, we also acknowledge the work we have yet to do and the challenges that define agricultural employment. Shifting migration and demographic changes among an aging farmworker population have tightened the labor market. Two decades ago, one quarter of California cropworkers were newcomers; now newcomers represent less than five percent of cropworkers. Legislation will also have impacts. Minimum wage increases and new overtime requirements in California will increase the cost of labor; and migration policy will continue to define labor availability in a sector supported by a workforce that is largely international.

Given these external factors, we have deepened our resolve to engage actively in reimagining the labor dynamics that make our food system possible. The dual risks of labor access and rising labor costs have become a catalyst for new ways of thinking about developing year-round workforces that offer quality, continuity, and productivity benefits in exchange for job security and career growth. We are deploying employment engagement teams across the business—along with direct communications with our teams—to understand how to provide the best human resources support in a changing labor market. We are closely analyzing demographic trends and industry best practices to help us build our own leadership approach. Among the programs that could have the most impact in fostering the best from our teams includes the role of training—not simply near-term functional training, but growth-oriented training—in continuous reskilling and upskilling to support both rapid technological innovation across the food system and career mobility.



#### AC'S GRIFFITH FARMS WORKFORCE VS. SURROUNDING COUNTIES, BY AGE GROUP

A greater proportion of our labor force is under 34 years of age, countering the aging farm labor trend seen in surrounding areas.

**Responsible Production** 



## GROWING QUALITY JOBS IN A SHIFTING FARM LABOR LANDSCAPE

As Agriculture Capital continues to expand into labor-intensive crops, we have a responsibility to ensure labor supply by investing in worker health and wellness. We operate in a sector where employment is very often physically demanding and economically precarious. Despite substantial obstacles, we are committed to moving toward a new regenerative model of farm labor that elevates individuals and strengthens communities.

#### **CREATING QUALITY JOBS**

In 2017, Agriculture Capital was responsible for over \$23 million in what we think of as "on-farm payroll" (essentially our reverse of the concept of "nonfarm payroll"), encapsulating the wage and benefit contributions we have made to both employees and contract labor across our farming and processing businesses. That number will grow as yield projections on our farms should create over 500 harvest jobs over the next five



a. On-farm payroll is an AC definition and is an aggregation of all farm and packing facility labor for all assets in portfolio from acquisition through 2017. Based on reported labor hours at an average hourly wage of \$10.50. Under reports for Griffith Farms, TreeSource, Legacy/Suntreat Packing which began reporting in July 2016 but were acquired earlier.

years. We can help drive economic growth and individual opportunity in the communities where we operate. Each tree we plant, each facility we revitalize, each pallet we deliver represents an opportunity for participation in the healthy-food economy.

#### LEVERAGING SCALE AND CROP STRATEGY FOR STABLE EMPLOYMENT

We look for synergies not only because of the business value they add, but also because of the opportunities they present for community wellbeing. With our entry into the table grape category in early 2018, we see new potential to increase job stability through year-round employment across crop types. The peak blueberry and table grape seasons have the potential to fill the summer lull in our

#### **PROJECTED 2018 CALIFORNIA LABOR NEED**

Packing and Picking, including Citrus, Berries, and Grapes



citrus work, assuming we can navigate the transferability of skill sets across differently crop types. Census data indicate that contracted farmworkers in California work only around 1,000 hours per year on average, suggesting that year-round employment holds real potential to increase farmworker income.

#### SUPPORTING EMPLOYEE LEADERSHIP

As we actively identify strategies to become an employer of choice in every area of our organization, we know that employee leadership will be central to our success. We want our employees to be the creative force behind our leading practices, and we are committed to building structures for communication within our business that support both daily operations and long-term strategy. We have piloted formal leadership programs and training opportunities to boost capacity across every aspect of our team and look forward to expanding these opportunities.

#### **REALIZING THE POTENTIAL OF TECHNOLOGY**

As we continue to implement a data-driven human resources strategy, we look to new technology for efficient recruitment, improved communication, insightful performance metrics, and safer, more comfortable jobs.

#### **GENDER OPPORTUNITY**



#### **PROMOTING EQUAL OPPORTUNITIES IN AGRICULTURE**

48% of the Agriculture Capital team is female, as is 50% of our executive team and 33% of our senior leadership team. And while this is not perfect equity, we are proud of the range of experience and perspectives we have attracted and strive for similar strides among our operations teams. We absolutely insist on providing equal opportunities for all people, regardless of gender, age, ethnicity, sexual orientation, or other areas where discrimination has historically slowed society's progress. We recognize that in the investment industry, women, young people, and minorities are underrepresented, so we strive to create an open, inclusive environment that draws together diverse experiences and points of view.

## 6 Quantifying Regenerative Value

### With every expansion of our business, we seek to instill a commitment among our teams to impact measurement.

This includes both the positive impact we create, as well as the negative impact we strive to avoid. As the access to and analysis of data across our business expands, we continue to identify opportunities to leverage the efficiencies and technical innovation that are inherent in our model.

As we have often articulated, we set a goal to baseline all of our assets using core sustainability benchmarks within the first year of their operations within our business. This year, that expands our baselined assets from nine to 14 and covers that data collection through December 31, 2017. We collect data quarterly and are now aligning those metrics with local AC Way objectives.

We are an active participant in the work of the Stewardship Index for Specialty Crops to establish relevant farm metrics that are fundamentally designed to help growers become more successful. In addition to the core SISC metrics we have been tracking since 2015, we have also helped create the Index's biodiversity and habitat metric and have engaged more recently in efforts to develop food waste and water efficiency metrics. We remain inspired by this multi-stakeholder collaboration.

We continue to advance regenerative farm management across our operations and have been developing partnerships and analytical tools to help guide our understanding of both the landscape and economic benefit of many of the practices we consider to be the cornerstones of responsible permanent crop farming. We have been optimistic that our farming innovations and investments offer measurable contributions to the ecosystems they rely upon and, certainly, to the businesses they support. This year, our collaboration with the Natural Capital Project, a global consortium of academic and NGO experts in ecosystem services valuation, has led to a pilot exercise in gaining a deeper understanding of the economic benefits of restorative farming practices. We looked at our



longest held farming operations in the Pacific Northwest and asked Natural Capital to gauge the net outcomes of several practices—namely the use of compost; cover cropping strategies; the no- or minimal-till realities of permanent crop agriculture; and the improvement or increase in native pollinator habitat.

While our operational decisions are imbued with a strong sense of environmental and social responsibility. our ultimate decision to dedicate resources and expand sustainability innovation projects depends on the ability of those projects to create real value, or in the vocabulary of our project partner, real natural capital. Their team's analysis (which validates our own carbon footprinting) suggests that regenerative strategies at one of our Oregon farms alone could be responsible for the storage of over 10,000 tonnes (metric tons) of carbon, valued at upwards of \$150,000 in current carbon pricing schemes. Similarly, while it is very early in our evaluation of our positive native pollinator habitat impact (which we described in more detail earlier in this report), Natural Capital's early simplified models suggest at least a 2% increase in yield-the equivalent of approximately 50 free acres on two central Oregon farms alone-could be anticipated from the restoration and establishment of foraging and nesting habitat.

Likely increases in sediment retention, as well as a net reduction in nitrogen export, could be expected under regenerative practices we have utilized. And while the



These charts illustrate early predictive modeling—in collaboration with the Natural Capital Project—on the value of cover cropping, composting, no- or minimal-till, and pollinator restoration (lighter shades) versus no such interventions (darker shades) on Oregon farm assets. This work represents the very early stages of deeper such analysis being scoped.

economic impact of those practices requires additional research, we can assume they contribute to the maintenance of healthy, productive soils and the efficient use of costly inputs, not to mention support for healthy fisheries and downstream water quality.

## VALUE CREATION THROUGH REGENERATIVE MANAGEMENT

Calculated from data from baselined assets through December 31, 2017



Notes on Leadership Indicators:

- Unless otherwise stated, all data have been collected since the start of operations.
- Cover Crops Agriculture Capital cover crops the alley rows at our farms. We use a mix of beneficial
  plants to support soil health, reduce runoff, increase carbon sequestration, improve water retention,
  and ultimately improve the productivity of our farms. To date, water challenges in the Central Valley
  have delayed the proliferation of cover cropping on our California assets, but we continue to look for
  innovative ways to translate this practice across regions.
- Weed Matting Weed matting is the practice of laying down a fine net around targets crops to control the growth of unwanted crops. By using this technique, we are able to reduce reliance on chemical applications to control weeds, which has far-reaching benefits for the health of employees, watersheds,

and pollinators. We are developing methodologies for measuring the impact of weed matting on reduced crop protectant use in conventional farming contexts and currently estimate that it has reduced chemical requirements by as much as half.

- Organic acreage Figure represents acreage currently in transition from conventional to organic or actively being evaluated for organic transition.
- Donations of blueberries and hazelnuts to food banks is based on crops that are available on blocks that are too immature to yet harvest commercially or can no longer provide sufficient yields to justify additional harvest labor.

### POUNDS OF BLUEBERRIES AND HAZELNUTS GLEANED BY SALEM HARVEST VOLUNTEERS FOR FOOD BANKS AND OTHER HUNGER RELIEF



2016	
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Last year's impact report featured our first annual aggregation of relevant impact indicators for assets we had baselined by the close of 2016. Similarly, we offer the table at the right as an update focused on the fourteen assets measured by the end of 2017. As noted. more will follow in our next report. We remain particularly focused on our ongoing community economic contribution, water stewardship, energy efficiency, and soil health progress and the snapshot they provide of our broader positive impact efforts. Perhaps most important is the growing attention to these metrics from our operations teams, as well as their dedicated contribution to the important measurement process.

2017 IMPACT DATA		Through December 31, 2017		COMMUNITY CONTRIBUTION	WATER STEWARDSHIP	SOIL H	IEALTH	
Farm Name	Year Acquired	Farmable Acreage	Crops	Full-time Equivalent	Applied Water	Soil Organic Matter	Soil Organic Carbon	On-Farm Electricity
				#	AC. FT./AC.	%	TONS/AC.	kWH/AC.
Humbug Farm	2014	1,055	Blueberry, Hazelnut	34	0.49	3.30	1.5	364
Halls Ferry Farm	2014	1,624	Blueberry, Hazelnut	55	0.57	3.17	1.5	499
Smith Farms	2014	1,009	Blueberry, Hazelnut, Wine Grapes, Row Crops	35	0.12	3.17	1.7	314
Fowler Ranch	2014	281	Citrus, Blueberry	20	1.92	fc	fc	6,338
Sierra Heights	2014	138	Citrus	2	0.93	1.11	fc	324
Phoenix Ranch	2015	187	Citrus, Blueberry	6	1.81	fc	fc	5,125
Griffith Farms	2015	2,044	Citrus	138	1.43	1.26	fc	588
Bixler Ranch	2016	1,262	Blueberry, Citrus, Almond	93	0	fc	fc	234
Sanger Ranch	2016	271	Citrus, Blueberry	11	1.52	0.74	fc	3,261
Sublimity Farms	2016	155	Blueberry	4	fc	7.09	7.7	5
<b>Richgrove Ranch</b>	2016	412	Citrus, Blueberry	13	1.19	1.55	fc	465

Notes on Farm Indicators:

- There is variability in water data due to high dependency on specific geographic location, crop type, and stage of development.
- For select properties, we are still in the process of collecting soil organic carbon data.
- For Fowler, Sierra Heights, and Phoenix Ranch, harvest labor is not included.
- On-farm electricity use is significantly higher at Fowler and Phoenix Ranch because a diesel-powered generator is in use at these farms.
- Rocky Hill Ranch, Victory Ranch, Cal Valley Citrus, Mowbray Farms and Van Delden Ranch were all acquired in late 2017 and will be baselined during 2018
- fc = forthcoming

FACILITY TYPE	YEAR ACQUIRED	COMMUNITY CONTRIBUTION	WATER STEWARDSHIP	CLIMATE & ENERGY
Packing & Cold Storage (Legacy and Suntreat)	2015	101 full-time equivalent	421 gallons/ton packed	207 kWh/ton packed
Nursery (Treesource)	2015	89 full-time equivalent	4.47 gallons/tree	0.16 kWh/tree
Packing (Silver Mountain)	2016	62 full-time equivalent	fc	843 kWh/ton packed

• Legacy Australia was acquired in late 2017 and will be baselined during 2018

fc = forthcoming

## 7 Collaborating on the Future

As The AC Way matures, we look forward to how it will enable internal conversations that will lead to the work that will ultimately form the basis of our future impact reporting.

Certainly, reporting on business efforts to create social and environmental impact is not the work. The work is what happens on the ground every day when people hold themselves accountable for making a difference – whether that's for our businesses, for the communities where we operate, for the planet that sustains us, or ideally, for all at once. We encourage our teams and always try to motivate their energy and initiative.

And while reporting is not the mark of impact itself, it plays a vital role. Reporting gives organizations like ours the opportunity to engage employees, vet ideas, and share stories that can inspire even deeper impact.

All of our projects to date have come out of a constructive exchange of ideas. The AC Way will also create clarity and consistency that provides structure for teams that often have to reconcile how best to spend their time on expanding responsibilities.

At the same time, no report or corporate-led initiative is a substitute for human relationships. Across the Agriculture

Capital family, we spend our days working together across a business that is amazingly heterogeneous. We are made so much stronger by the diverse experiences of our teams, and yet, that reality also makes gaining alignment on something as complex as a regenerative food system that much more difficult. We are constantly amidst the sometimes clumsy, always inspiring process of connecting as people to foster understanding and excellence.

## We see this as the critical path to exceeding our own expectations.



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## Agriculture Capital

#### FARMS

HALLS FERRY FARM Independence, Oregon

HUMBUG FARM Independence, Oregon

SMITH FARMS Dundee, Oregon

SUBLIMITY FARMS Sublimity, Oregon

FOWLER RANCH Fresno County, California

SIERRA HEIGHTS RANCH Tulare County, California

PHOENIX RANCH Fresno County, California

RICHGROVE RANCH Tulare County, California VICTORY RANCH Tulare County, California

SANGER RANCH Fresno County, California

BIXLER RANCH San Joaquin County, California

EAST REDBANKS RANCH\* Woodlake, California

WEST REDBANKS RANCH\* Woodlake, California

ALTA LOMA RANCH\* Woodlake, California

MURMACK RANCH\* Woodlake, California

HILL RANCH\* Woodlake, California VAN DELDEN RANCH Woodlake, California

EL MIRADOR RANCH\* Woodlake, California

SOUTH STRATHMORE RANCH\* Strathmore, California

TIERRA VISTA RANCH\* Strathmore, California

ROCKY HILL RANCH Strathmore, California

MOWBRAY FARM Berrigan, New South Wales, Australia

\*GRIFFITH FARMS

#### PACKING AND NURSERY OPERATIONS

LEGACY PACKING & SHIPPING Dinuba, California

LEGACY AUSTRALIA PACKING & SHIPPING Cobram, Victoria, Australia

SUNTREAT PACKING & SHIPPING Lindsay, California

SILVER MOUNTAIN PACKING & SHIPPING Sublimity, Oregon

CAL VALLEY CITRUS PACKING & SHIPPING Lindsay, California

TREESOURCE CITRUS NURSERY Woodlake, California

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