



# **Regeneration & Resilience** The real work of

improving agriculture

**IMPACT REPORT** (Results through December 2019)





Our view of 2019 is shaped by events that unfolded in 2020. They highlight values embedded in the AC Way.

e are pleased to issue our fourth Impact Report.

In prior reports, we've highlighted the ecological benefits of regenerative farming, described efforts to provide best labor practices, and noted our work with external stakeholders. We continue with these themes and bring more attention to how we actually get this work done — we've been building systems to ensure our values are present across all of our facilities.

This work helps our business thrive, enabling us to address such risks as extreme weather, tight labor supplies and water insecurity. When drafting this 2019 report in the spring of 2020, we encountered new risks.

With the initial spread of COVID-19, we took early steps based on federal guidelines: taking employee temperatures daily, providing personal protective equipment, adjusting processes and equipment, keeping visitors out of facilities, and helping workers see how to reduce their risk of exposure. Nonetheless, in May 2020, a case of COVID-19 was discovered at our Vancouver, WA packing facility. Within just one week, 42% of the workforce there was affected. We were transparent about the outbreak and worked directly with the county to ensure testing of all employees and their close contacts.

At roughly the same time, protests for social justice erupted across the U.S. These demonstrations did not play out in our fields or facilities, but the issues raised affect many of our workers. The protests are a reminder of the need to continue working to improve the lives of these essential workers.

These events lead us back to themes we've discussed in these reports: transparency, engagement, respect for people and nature. We've tried to embrace these values since our inception; the events of early 2020 remind us of their urgency.

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#### TRANSPARENCY

## Offering a Look Inside the Farmgate

Our farm managers are beginning to see the value of transparency. Data lead to conversations.

The stereotype of the taciturn farmer exists for a reason: Typical farmers don't talk much about their operations, seeing little value in being open in a competitive marketplace. We are trying something different, placing a high value on transparency.

Some national grocers require a degree of transparency — food safety forms, certification for organic production, or a sense of our practices so they can tell customers how their produce is grown.

We mean something different. We engage often with nonprofit partners — with their outsider perspectives and scientific insights, they introduce us to new approaches and help us build unexpected alliances. For them, credibility is essential so they demand a far more rigorous form of transparency. They want direct access to our farms, farmers and data. Transparency has internal value as well. When managing more than two properties, transparency can amplify best practices and ensure broad learning from mistakes. When we track and share results, we build performance-based bridges among colleagues working in different geographies. A key challenge is to converse in ways that don't feel like judgement to those involved — easier said than done. Another challenge: Being publicly transparent about all of our properties, not just those with novel practices or studies.

There are risks. We signal our intentions when we publicly report on our progress. We will at times miss the mark — when production slumps, markets shift, or our properties are in various development stages. In these cases, we still see transparency as the remedy: an objective observer will be able to see the whole of our work and draw a reasonable conclusion.

#### What transparency looks like on the farm

We've committed to it, but there are times when transparency can be difficult — even uncomfortable. Here are some examples:





#### Learning labs

External groups are deploying on our farms for experiments on pollinators, carbon storage, ecosystem services, and energy and water use. They can share data and scientific learnings, which are often influenced by multiple factors beyond our control.

#### **Backward steps**

We report year-over-year impact progress for each farming unit. Many of our farms show consistent annual improvement; some do not. Transparency on this level invites discussions of cause, effect and possible change.

See our annual data update on page 14.

#### Proving economic value

If our goal is to help change agriculture and it is — we must ultimately answer a key question: Did a specific change increase the farm's yield? It's complicated — many factors affect yield, which varies greatly by field and by year. We're exploring ways to answer this question publicly, regardless of the answer.

#### LABOR

## **Building a Culture that Respects, Protects and Retains Workers**

With a widely reported shortage of skilled agricultural workers, we can recruit and retain by committing to worker protections and developing new approaches for full-time employment.



## • Ver the course of a year, we provide 5,300 employment opportunities.

Field labor takes place on 19 farms, most of them in California and Oregon, with others in Washington and Australia. When considering labor issues, it may be better to think of more than 650 unique fields. The reason: One farm may be comprised of dozens of noncontiguous blocks, with the furthest plots 10 or more miles apart. We also have teams working at seven processing and storage facilities.

In both types of investments, we fulfill our mission with a mix of full-time and temporary workers. The temporary worker population fluctuates with seasons: at the height of the table grape season, we will have more than 2,300 harvesters in the fields.

Our 650 full-time employees have benefits, including health insurance and access to a 401(k) plan. When hiring temporary workers, we work closely with a contracting agency to slot workers into available positions as various harvests occur. Once crews are engaged, the agency becomes an integral liaison between the crew and our farm managers and crew leaders; this helps align expectations and ensure our values are indeed present in our fields. Being in the fields together with the hiring agency we have constant reminders of our shared responsibility to these workers.

#### Managing for cultural change

Supporting workers across a broad geography and diverse product categories presents challenges. Additionally, our industry tends to avoid long-term commitments to workers and typically judges managers solely on the crop yields they to generate. Our newly hired farm managers are sometimes surprised at the attention we give to labor and other issues. But we welcome them and begin the conversation.

Poor treatment of farm labor has cultural roots; we think the solutions, at least on our properties, will be cultural as well. Expecting a singular company culture to be evident on all of our dispersed locations is a daunting challenge — but it is our expectation.

To build a culture based on respect for people and nature, we use an approach and tracking mechanism we call the AC Way. On farms, we track 143 metrics to guide managers toward our highest standards for labor, food safety, environmental regeneration and other issues. Newly acquired farms must benchmark at a minimum of Tier 1 — simply a foundation. Each tier is progressively more detailed, and farm managers

> Our workforce diversity is increasing, though we have much more to do.

45% of salaried roles are non-white

of salaried roles are women

Data for Agriculture Capital Operations

must track against a wider range of metrics, as they move their farm toward Tier 5. Our expectation for all farms is to reach Tier 5 — effectively hitting or exceeding every standard.

Of the 143 standards, 46 focus on labor issues:

- 17 specific standards focused on employee rights
- 12 on employee safety
- 9 on human resource policies
- 4 on employee benefits
- 3 on employee welfare
- 2 on labor contractor issues

We see these labor standards as essential markers for treating workers with dignity and respect — and we track them methodically for that reason. If we miss the mark, we can admit to our shortcomings and provide remedies. The standards included in the higher tiers help our managers go beyond the basics to start building conditions that workers find satisfying.

There are cultural shifts evident in the fields: 45% of salaried roles at Agriculture Capital Operations are non-white team members and 25% are women. We see both figures as a sign of progress and a call for continued improvement.

For newer managers, the wide range of issues and the level of detail can be frustrating. Our internal challenge is to listen to them without judgement, help them see value in these steps, and help them achieve their goals. These conversations help ensure groups from all sectors of the business work as one.

## Retaining workers in a tight market

Retaining a dedicated workforce of skilled field workers is key to our business. Recruiting, hiring and training workers represent significant costs — which can be avoided as workers recognize our good faith efforts to improve working conditions.

Any strategy for retaining workers must evolve because the labor force is evolving. Workers 45 or over now make up 38% of the farm labor workforce, a percentage that has climbed steadily for two decades.\* There is a clear generational divide, with highly skilled workers being older. Many young people are less interested in these jobs; other young people who would be grateful to be hired can't get access. Policies related to immigration affect this trend, as do housing costs, particularly in California.

By January 2023, California's minimum wage will have increased 50% over six years, With labor a significant part of the cost of production, we expect increased automation, reducing job availability. We expect a new category of food system jobs, with expanded technical skills, wage growth, and a transition away from repetitive tasks.

To navigate these changes, we are collaborating with innovative labor contracting partners, who encourage the development of farm labor as a profession — with fair wages, benefits, training and growth opportunities. Rather than import more workers to address labor shortages, they work to improve the quality of existing jobs. And they work to find year-round work for their employees without requiring them to travel great distances.

#### Labor Rights & the AC Way

The AC Way covers such issues as food safety, energy, water use, chemical use, field waste, soil and plant health, emissions and integrated pest management.

Some of the 46 metrics labor-related protections are:

#### TIER 2

- Workers document they have not paid recruitment or document processing fees
- Steps taken to protect against excessive noise, heat, sunlight, dust, etc.
- Worker housing meets a list of detailed criteria

#### TIER 3

- Health and safety committee formed with worker representatives
- Regular safety meetings are convened

#### TIER 4

- Parental leave policies are implemented
- Farm managers demonstrate that workers' children have access to education

See AC Way data on Page 13

LABOR

## The Future of Work in Food Systems

Year-round employment with benefits could help farmworkers and their families and would help us be a better employer

The work done in our fields can be highly skilled. It is detailed and precise for each crop and variety. At Columbine Vineyards, for example, we have 16 table grape varieties, each requiring different care. Harvesting our Sumo Citrus<sup>™</sup> requires different techniques than are deployed in other citrus groves. As these laborers move through fields, we see them as artists with pruning shears, clippers and totes.

For each crop and for each growing season, we must hire these workers anew. There may be five to seven months of work in table grape vineyards, after which those crews must find new work. In citrus, the work period may be three to six months in the groves. After each of these seasons, workers search for the best short-term opportunities. Farms often run the risk of losing temporary workers to local competitors or to relocation. Farmworkers are often on the move, with the search for more work placing stress on their families. One way to retain highly skilled or highpotential employees is to create year-round employment prospects. We can use our geographic concentration and the vertical nature of our business as a way to offer full-time employment to workers.

We've begun to focus on this idea in the southern San Joaquin Valley, where citrus and table grape fields have differing seasonal employment peaks. Rather than seeking different labor forces, we are beginning to create a workforce with diverse skills. Because they are permanent employees, we can train them on a range of crops and systems. We supplement field work with shifts in our nurseries and local processing facilities. As their skillsets grow, they gain more options and leverage — with us or with other employers.

This will not eliminate our need for large numbers of temporary workers. At our current scale, we can envision a pathway



With multiple farms, harvests at different times, and production facilities all within driving distance of each other, we can provide some workers with year-round employment.

to offering 200 or more workers, and their families, the sense of security that comes with full-time employment with benefits. We may also explore this approach in other geographies. And we are open to collaborating with other companies to create jobs that serve both companies while offering full-time, year-round positions.

#### A Typical Year Rotation for a full-time AC Worker

- 5 months Grapes
- 3 months Blueberries
- 2 months Citrus
- 2 months Processing Plant



## **Effective Natural Pollinators Drive Quality Harvests**

We help wild bee colonies thrive – they help produce quality blueberries and save us money.

t many farms, we've worked to support and increase the presence of wild pollinators and other beneficial insects. The primary mechanism is hedgerows, which we began planting in 2014 with mixed native plants.

We do this to restore biodiversity. We gained Bee Better certification on two farms in 2019, a seal that gives consumers confidence their food was grown in ways that support wild pollinators. We expect to gain certification on additional farms in 2020 and 2021.

We also do it because pollinators are vital to blueberry production. If the plants selfpollinate, the fruit is small and less flavorful. With increased pollinator foraging, fruit guality and volume increase significantly. Benefits aren't limited to blueberries: On our Bixler Ranch in California. wild bees now pollinate both berries and almonds.

Insect drawings used with permission by Emily Walker. Instagram @fernsandfins

For the past four years, we've engaged an outside field biology consultant to track wild pollinators on two Oregon properties – Halls Ferry and Humbug Farms.

The team found that wild colonies there are showing resilience. In 2019, with heavy spring rains leading to flooding, we expected pollinator numbers to drop - many wild pollinators are ground nesting. We instead saw a 97.7% increase over the previous year. This builds on earlier increases: Since 2016. wild pollinators on the two properties have increased sixfold.

They also tracked 23 bee species — a significant increase over the number found in 2016 - and 19 other beneficial insect species.

The potential costs savings are real. Berry producers typically make up for the absence of wild pollinators - supplement them - by engaging beekeepers. In 2019, the cost of pollination on one of our Oregon farms was \$238 per acre; on one of our California farms, it was \$390.



\$400.000 FOR BLUEBERRY POLLINATION

The potential cost savings from healthy pollinators can be significant: In 2019, we spent close to \$400,000 for blueberry pollinators.

#### CLIMATE

## Farm Soil as a Carbon Sink

Our regenerative practices sequester significant carbon, offering relief for the climate and more nutritious foods for consumers

At our Columbine Farm in the southern San Joaquin Valley, we've seen fast progress in building soil carbon in part because soils high in clay can hold more. **S** ince launching, we've made significant investments in building soil health, knowing these investments would benefit both the climate and our investors. We now have a clearer sense of some of the climate benefits.

The net effect of regenerative in-field practices on our U.S. properties is a sequestration of 13,288 tons of  $CO_2e$  (or  $CO_2$  equivalent, which allows for an even comparison of climate-altering substances, which have varying degrees of impact).

Our emissions amounted to 5,217 tons of greenhouse gases (GHGs), primarily from nitrous oxide emissions associated with fertilizer use, crop residue and organic matter cycling in the soil. These were negated by 15,569 tons of  $CO_2e$  sequestered in soils and 2,937 tons sequestered in annual woody biomass.

#### **Portfolio Annual GHG Sequestration, Including Biomass**

The field-based emissions (purple) are negated by carbon sequestration (green), resulting in a net positive sequestration (blue).



#### **Farming Practices With Net Sequestration**

The study found net sequestration with both funds. As we dive deeper and look at results from individual farms, we start to see which crops can sequester more carbon in which locations. This may shape choices we make in future seasons.



Black bars show the range of values containing 95% of all fields.





The sequestration potential of different crops in our portfolio is evident here. This may affect our future crop mixes. Black bars show the range of values containing 95% of all fields.

Data credit: Upstream Tech

This is important, of course, because agriculture and climate change are linked. Farming practices contribute to the problem; they can also remedy the problem. These new figures, reflecting 2019 production, clearly demonstrate the positive value of our regenerative practices.

The assessment examined each of our U.S. farms, allowing us to better understand the potential for various crops and management approaches. The impact of cover cropping was significant: fields with cover crops are sequestering three times more CO<sub>2</sub>e than those without cover crops.

#### **Building on previous models**

The project was conducted by Upstream Technology. Their work relies on, and builds on, the existing USDA COMET-Farm Tool, a well-validated mechanism for quantifying both emissions and soil carbon storage. In the COMET-Farm system, input data on management practices are combined with data on weather and soil from USDA databases, and are used to model plant growth and the carbon cycle. The USDA system has not yet modeled blueberry and hazeInut production impacts, so Upstream worked closely with the team behind COMET-Farm to identify the best proxies for this study (wine grapes and walnuts).

Upstream simplifies access to the COMET-Farm model and uses a database of regional practices to reduce the cost and time involved in these assessments. This is key to their value: the speed will ultimately enable real time estimates of projected impacts. This can transform the activity from a year-end assessment into an ongoing management tool. Our farm managers can consider sequestration impacts while planning their next growing season.

There are some limitations to the study. It does not yet include non-farm impacts, such as the production of fertilizers and other inputs. And some of the sequestration with these perennial crops is tied to the long-term fate of the woody biomass. How those plants are retired is key to their sequestration values, although the vast majority of sequestration is soil laden.

#### Potential value in carbon markets

In addition to its climate impact, our work to build soil health can directly benefit our investors.

As carbon markets expand, protocol development for offset credits related to the storage of carbon in agricultural soils will increase. Protocols typically require offsets to be additional (above and beyond business as usual), measurable and permanent; our regenerative practices would meet these criteria.

Projections of carbon-market pricing estimates for agricultural products vary widely — from as little as \$2 per ton to more than \$100. A conservative estimate may be derived by considering California's cap and trade program, under which carbon was trading for \$17 per ton at the end of 2019.

## Drought resiliency from increasing soil carbon

Our regenerative practices also have multiple soil-based benefits. They show how agriculture can contribute to climate solutions. They build healthier soils that allow us to grow better, more nutritious crops.



And they help build resilience in the face of climate change.

If we consider data from farms operated in Fund I — properties we've managed the longest — we see a 25% improvement in soil organic matter since we established our baselines. At one location, Halls Ferry Farm, the improvement has nearly doubled.

The value is clear when we see how this changes the soil.

When soil organic matter goes from 1% to 2%, the soil becomes less dense and contains greater microbial matter. The change in structure and composition associated with this 1% increase means an acre can hold an additional 20,000 gallons of water.

At our Halls Ferry Farm, baseline soil tests showed 2.58% soil organic matter. At the end of 2019, soil organic matter climbed to 4.8% — an increase of more than 2.2%. This means these soils can hold an extra 44,000 gallons per acre — the equivalent of 1.5 inches of rain. It means that in a downpour, less water • We track soil moisture levels to ensure efficient water use. Our soils can hold more water — with more carbon, soil retains more moisture — and technology makes those gains go further.

Image credit: PowWow Energy

will run off and more will be retained in soils. It is built-in resilience against water scarcity.

We see added resilience in other ways. The increased microbial activity associated with increased soil organic matter can make nutrients more available to the plants. It can foster greater diversity of insect life, a shift that tends to stop any one pest from having an outsized impact.

With agriculture potentially shifting from being a cause of climate change to a solution, we see a coincidence. The steps we take to reduce the threat of climate change are the very steps that increase value to our investors, increase the resilience of our farms, and position us to produce more and better food.

#### All in the details: Reducing the climate impacts of our facilities

The work of energy efficiency can be methodical, often involving a string of small successes. Consider our Legacy Packing and Cold Storage facility in Dinuba, CA.

For years, before and after we purchased the facility in 2015, it ran like most packing facilities. In peak season, fruit would be processed as quickly as possible. Inefficiencies, water leaks, or gaps in air pressure tubes might be noted but not addressed until after the season — no one wants to interrupt the flow.

In 2019, to change this approach, we installed systems for real time capture of energy data; those data, in turn, led to recommended improvements to balance out power use and reduce our peak load requirements. These changes will be made once a solar array is fully installed on our property. The efficiency changes will reduce our power use 8%, and the shift to solar will improve air quality in our community.

We kept going. Typically, conveyors in packing facilities never stop — again, no one wants to interrupt the flow. We took automated tactics used in facilities managed by companies like UPS and FedEx — but rarely in agriculture — stopping conveyors with no packages on them. A seemingly small change, it can reduce daily power needs 50%. For the facility as a whole (which includes cold storage), this cuts energy consumption 6%.

In a facility where annual energy costs exceed \$1 million, these changes represent \$140,000 in annual savings. Another change signals a culture shift. The facility relies on air compressors, with tens of thousands of seals through the system. Leaks are constant — and noisy. In a typical facility (ours included, until recently), they are ignored until season's end. We've now begun fixing leaks in real time — which can mean stopping the line for up to ten minutes. We were concerned workers would not want stoppages — they are paid primarily by the volume they process, but they are actively identifying leaks on their own. They know we can save energy, and they appreciate a quieter and better quality workplace.



• Workers typically want to keep packing lines moving — higher volume can mean higher pay. But our colleagues sometimes stop the line — to save energy.

# Scaling Up: Growing Access to Healthy Foods

SCALE

People at all income levels should have the right to nutritious foods grown ethically

We find inspiration in the many small farmers who have developed and shared knowledge about soil health practices. We appreciate that they help consumers see value in ethically grown food. We seek to expand on their work.

Today in the U.S., less than 1% of farmland is managed with regenerative practices,\* and only 4% of food sales are organic.\*\* These numbers are too low. We choose to grow so that more working lands will be managed with practices that regenerate ecological systems.

If we continue to expand our acreage, we can amplify the benefits of regenerative practices — more carbon sequestered, improved water quality, better drought resilience, healthier habitat. All of these are essential on a much larger scale at a much faster pace — and they push us toward growth.

Farming regeneratively at increased scale can give more people access to ethically grown food at prices they can afford. It is how we will provide organic grapes at national discount stores and nutritious, affordable blueberries at regional supermarkets.

We keep costs down by engaging throughout the food delivery system — owning land, managing farms directly, owning and running processing facilities, handling delivery to wholesale customers and controlling marketing. Our increased purchasing power reduces our input costs. Our increased size gives us access to more customers — giving us price leverage.

This vertical engagement reduces our risk by tempering wide crop price swings with the more stable pricing of processing and delivery. Our direct access to market information can influence farm production in real time. We can better segment our products as we go to market. These risk mitigations are important — they enable the necessary growth.

\*Green America Regenerative Agriculture 101. \*\*USDA ERS, Organic Market Overview.

#### Advantages of Scale

Operating on this larger scale can reduce risk to our investors and reduce prices for consumers.







#### **Cold storage**

With cold storage facilities, we can prolong our delivery window for fresh blueberries by 40 days. We extend this delivery window further by farming in different climactic zones. This helps us meet long-term contracts with grocers, and it reduces waste by allowing for fast freezing of products.

#### **Mechanized harvesters**

We invest in large farm vehicles that can reduce the cost of some harvests by as much as 60%. Our investors can see that these expenditures have a clear path to payback and genuine returns — many farmers today do not have access to this kind of capital.

#### **Choosing markets**

With increased volume, we have access to more markets. We can segment fruit by quality and demand. In citrus, for example, we can sell in multiple categories — from top-quality Sumo Citrus<sup>™</sup> to frozen pulp production.

Proving that regenerative farming works on a large scale makes it more likely others will use these practices. That means better farming on more acres.



#### **Applying Small Farm Lessons on a Big Scale**

Prior to joining Agriculture Capital as Category Operations Manager, Blueberries & Hazelnuts, Tyson Davies worked on a 171-acre organic farm two hours southwest of Portland, OR. We asked him about the differences between big and small farms.

#### What did you like about a small organic farm?

Summer here in Oregon is the best, and my wife and I were farming together. It was a great lifestyle, eating food we raised. I liked that the farm was both organic and biodynamic. We were very compost-focused, used the manure from beef cattle and tried to maintain as much of a closed loop as we could. And I liked the variety of crops.

## What was hard about it?

The risk. It's an amazingly fragile system. There are so many things beyond your control – labor costs, crop performance, pest pressure, weather, market prices. The profitability swings year to year are significant. You can have a great year — or you can work hard the whole year and find you lost money.

## What value do small farms offer?

I think they're a critical link between food and our sense of place. They put a face to the farmer and to the food. And they really are a very important training ground for young farmers.

Mowbray Farms, New South Wales, Australia. Cover crops between citrus rows help increase soil organic matter, improve soil structure, and retain more moisture.



Tyson Davies

#### So why did you leave and join Agriculture Capital?

I want regenerative practices to go fully mainstream — that's the point, right? I think we can do more for the soil and more for biodiversity if we take some of the risks and cost out of the system. Going vertical does that - capturing value at every step - so we can invest more in soil health. I'm also focused on climate and soil health – the two are linked – and perennial crops give us a chance to move the needle on climate. And I really like our crop diversity -20 varieties of blueberries on a single farm!

#### What value do big ? farms offer?

We can be more efficient and keep prices down — that's huge. It's how we reach more people and more acres. We can bring greater rigor to our work. When we put in hedgerows we can know exactly how well it's working — it's no longer a guess or a hunch. If you're interested in change, capturing the data really matters.

## **AC Way** A Bird's-Eye View of Progress

This chart shows our progress on AC Way metrics. Horizontal lines show farms and facilities. Vertical lines show each of the 143 AC Way metrics. Big green patches show broad success — they remind us to share best practices internally. Big light grey areas show we haven't yet hit our mark — we don't use this as a punitive tool but instead use it to facilitate discussion.

#### KEY

METRIC ACHIEVED DOES NOT APPLY NOT ACHIEVED

#### Worker Safety (#65-71)

Nearly all farms hit specific marks for worker safety. Workers using chemicals have appropriate personal protective equipment and safety training; chemical use records are kept current. Exposure to excessive noise, heat, dust and other contaminants is reduced. Swift repairs to facilities and equipment to reduce risk of injury. Most of these Tier 2 metrics have legal implications; higher tiers go beyond compliance.

#### HAVE COMPLETED 75% OR MORE OF THE METRICS IN THIS GROUPING



### Soil Health (#84-87)

These involve multiple steps to measure and improve soil health. Includes steps to improve soil structure and tilth, increase soil organic matter, protect appropriate salinity and prevent soil degradation. Farms in our system longer have done more on this front.



HAVE COMPLETED 75% OR MORE OF THE METRICS IN THIS GROUPING



\* 16 farms currently baselined

AC Way data is through Q3 2019. All data self-reported. All assets are abbreviated.



#### **Emissions** (#114-117)

This group describes practices to track and minimize greenhouse gases, particulates, and volatile organic compounds. Our farm managers don't yet have the tools to meet these metrics, but our work to set carbon baselines for farms will help them move forward here.



#### HAVE COMPLETED 50% OR MORE OF THE METRICS IN THIS GROUPING

# 73%

## OF OUR ACRES ARE AT TIER 3 OR HIGHER



# **2019 Impact Data**

Year-over-baseline data shows the cumulative value of regenerative practices.



FY 2018

FY 2019

0.5

FY 2017

0

FY 2018

FY 2019

FY 2017

0.5

0.0

## Facility Water Stewardship Snapshot





Offset of annual nursery water use through on-site recapture program





Grape cold storage versus prior year

#### **Additional Metrics**

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**RECYCLING**/

Blueberry fresh pack facility (toward zero waste goal)





In table grape secondary packaging (exceeded 50% reduction goal)

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## **2019 Resource Data**

Annual data update and % change over prior year

FUND 1 INVESTMENTS								
	FARMS	FULL TIME EQUIV. EMPLOYEES	<b>APPLIED WATER</b> (acre feet per acre)	<b>ENERGY</b> (kWh per acre)	SOIL ORGANIC MATTER (%)	SOIL ORGANIC CARBON (%)		
OREGON	Humbug	<b>38</b> -7%	<b>0.6</b> -3%	<b>427</b> -5%	<b>3.93</b> 9%	<b>1.83</b> 21%		
	Halls Ferry	<b>57</b> -12%	<b>0.54</b> -25%	<b>347</b> -33%	<b>4.8</b> 45%	<b>2.54</b> 81%		
	Smith	<b>20</b> 5%	<b>0.12</b> 0%	<b>281</b> -29%	<b>3.6</b> -7%	<b>1.62</b> -18%		
CALIFORNIA	Fowler	<b>15</b> -37%	<b>1.94</b> -12%	<b>486</b> -78%	<b>0.75</b> -16%	<b>0.44</b> -16%		
	Sierra Heights	<b>3</b> 0%	<b>1.09</b> 23%	<b>266</b> -8%	<b>1.19</b> -2%	<b>0.69</b> -3%		
	Phoenix	<b>10</b> 18%	<b>0.64</b> -69%	<b>549</b> -84%	<b>0.82</b> 14%	<b>0.48</b> 14%		
	Griffith Farms	<b>121</b> -14%	<b>1.55</b> -11%	<b>677</b> -15%	<b>1.51</b> 9%	<b>0.88</b> 10%		
	Van Delden	<b>6</b> 0%	<b>2.01</b> -22%	<b>1339</b> -60%	<b>1.9</b> 23%	<b>1.1</b> 22%		
	Sanger	<b>9</b> -10%	<b>0.66</b> -49%	<b>949</b> -55%	<b>1.1</b> 12%	<b>0.64</b> 14%		
	FACILITIES	FULL TIME EQUIV. EMPLOYEES	WATER EFFICIENCY	ENERGY EFFICIENCY				
CALIFORNIA	Legacy Packing & Cold Storage	<b>203</b> -1%	<b>829</b> -12%	<b>203</b> -22%				
	TreeSource Nursery	87	6.33	0.14				
		-22%	54%	75%				

#### **Aligning Strategy**

We also try to look at our progress through the lens of leading external initiatives, including Project Drawdown (specific steps to stabilize the climate) and UN Sustainable Development Goals (17 initiatives to place the global community on a safer, sustainable path). We engage investors through the Global Impact Investment Network and the Principles for Responsible Investing. In 2019, we were awarded a USDA Conservation Innovation Grant, and we continue to advance farm sustainability efforts through our work with the Stewardship Index for Specialty Crops and other emerging initiatives.













FUND 2 IN	VESTMENTS					
	FARMS	FULL TIME EQUIV. EMPLOYEES	<b>APPLIED WATER</b> (acre feet per acre)	<b>ENERGY</b> (kWh per acre)	SOIL ORGANIC MATTER (%)	SOIL ORGANIC CARBON (%)
CALIFORNIA	Bixler	<b>56</b> 6%	<b>1.59</b> -16%	<b>489</b> -3%	<b>2.47</b> -20%	<b>1.44</b> -20%
	Richgrove	<b>13</b> 8%	<b>1.21</b> 29%	<b>260</b> -33%	<b>1.53</b> -2%	<b>0.89</b> -1%
	Rocky Hill	<b>12</b> n/a	<b>0.2</b> n/a	<b>91</b> n/a	<b>1.9</b> n/a	<b>1.1</b> n/a
	Victory	<b>47</b> 88%	<b>1.23</b> 62%	<b>337</b> -63%	<b>2.25</b> 48%	<b>1.31</b> 49%
	Cal Valley Citrus	<b>16</b> -18%	<b>1.55</b> n/a	<b>472</b> 51%	<b>0.94</b> n/a	<b>0.55</b> n/a
	Columbine Vineyards	<b>1154</b> 4%	<b>2.29</b> 8%	<b>466</b> 7%	<b>1.0</b> n/a	<b>0.58</b> n/a
	Belle Verde	fc	fc	fc	fc	fc
OREGON	Sublimity	<b>5</b> -23%	<b>0.66</b> -38%	<b>87</b> -71%	<b>7.97</b> 12%	<b>3.44</b> 3%
	Flying Hills	fc	fc	fc	fc	fc
NSW, AUSTRALIA	Mowbray/Wattletree	<b>38</b> 365%	<b>2.45</b> -22%	<b>743</b> 16%	<b>0.86</b> 12%	<b>0.5</b> 11%
	FACILITIES	FULL TIME EQUIV. EMPLOYEES	WATER EFFICIENCY	ENERGY EFFICIENCY		
OREGON	Silver Mountain Packing	<b>24</b> 19%	<b>425</b> 8%	<b>192</b> -23%		
CALIFORNIA	Cal Valley Citrus Packing	<b>28</b> n/a	<b>191</b> n/a	<b>4440</b> n/a		
	Columbine Vineyards Cold Storage	<b>27</b> -49%	<b>306</b> -23%	<b>95</b> 21%		
VICTORIA, AUSTRALIA	Legacy Packing	<b>51</b> 48%	<b>834</b> -37%	<b>408</b> 22%		
WASHINGTON Firestone Pacific Foods		fc	fc	fc		

Baseline years for Fund I and Fund II companies vary depending on year of investment. Typically, baselining occurs within the first year of ownership. Water data variability often relates to specific geographic location, crop type, and stage of development. Employment delta has wider range for some entities based on a variety of factors, including farm management structure and geographic proximity to other entities. For some ranches, harvest labor is not included as those data are captured at the packshed. n/a = entity was baselined in 2019 fc = forthcoming

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#### BACKGROUND

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References in this report to the funds refer to the pooled investment vehicles managed by AC. References in the report to businesses, brands, water rights, food, customers and other agricultural assets are assets that are owned by the funds. References to employees refer to the people that work on behalf of the funds' agricultural businesses and can include employees of AC, AC's affiliates or 3rd party contractors.

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Some forward-looking statements are made in this report such as "anticipate, "plan," "continue," "estimate," "expect," "may," "will," "believe," "predict, "potential," "project" or other similar words. The forward-looking statements involve certain risks and uncertainties. There are many factors that may cause actual results to differ materially from those expected, contemplated, projected, forecasted, estimated, or budgeted in the forward-looking statements.

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