

## Summary

### 2021 (12 months) DAIRY FARM RESULTS · 87 Acres in California's Central Valley

WATER CONSERVATION		Units
2021 Actual Water Saved	70,589,102	gallons
Water Saved Price/gallon	\$0.00209	dollars
<b>2021 Conservation Contract Invoice</b>	<b>\$148,040</b>	<b>dollars</b>

WATER DIVIDENDS		ROI
Total Social Value	\$4,405,215	29.9
Total Market Value	\$802,212	5.4
<b>Total Water Dividends</b>	<b>\$5,207,427</b>	<b>35.2</b>

This summary provides a **Return on Investment (ROI) analysis** of the location specified, with actual water use and crop yield data. Impacts are measured and verified by stakeholder group, with regard to water use, crop yield, and a host of environmental, social and economic factors.

Reports are provided per year of Conservation Contract™ duration; this report assesses the 2021 production year.

- **The ROI analysis of the outcomes for each stakeholder group shows a positive social return associated with this project.** An investment of \$148,040 creates approximately \$4,405,215 of net social impact in 2021, resulting in an ROI ratio of 29.9.
- In addition, **\$802,212 in direct market value is returned to the contract buyer**, largely from the value of enhanced reputation, carbon sequestration, nitrogen and phosphorus avoidance—with a direct market return of \$5.42 for every dollar originally invested.
- **The initial investment of \$148,040 in financial capital realized a collective return of \$5,207,427—for a total return on investment of 35.2.**

## MARKET VALUE

Reduced water risk for value chain, improved license to operate	\$54,363
Market value of carbon sequestered	\$5,936
Market value of nitrogen avoidance	\$600,596
Market value of phosphorus avoidance	\$141,317
<b>Total Market Value</b>	<b>\$802,212</b>



## SOCIAL VALUE

Stakeholder	Outcome	Social Value
<b>Environment</b> TOTAL SOCIAL VALUE \$7,527	Soil Formation	\$168
	Soil Erosion Control	\$305
	Water Quality Enhancement	\$4,505
	Regulating Water Quantity Runoff	\$611
	Nutrient Cycling	\$658
	Habitat Creation / Preservation	\$115
	Biological Control - Herbicide Use Reduction	\$1,165
<b>Agriculture Value Chain</b> TOTAL SOCIAL VALUE \$18,019	Pollinator Populations Support	\$3,019
	Enhanced Marketing Opportunities	\$15,000
<b>Alfalfa Farmers</b> TOTAL SOCIAL VALUE \$1,333,116	Soil Compaction Reduction	\$463
	Increased Crop Revenue	\$44,396
	Operating Costs Savings	\$56,633
	Share of Contracts Sales	\$37,010
	Opportunities for Sustainable Agriculture Grant Funding	\$25,000
	Drought Resilience	\$17,175
	Property Value of Cropland Preservation	\$1,152,360
	Preservation of Geomorphology & Land Integrity (subsidence)	\$79
<b>Dairy Farmers</b> TOTAL SOCIAL VALUE \$14,700	Nutrition Density Improvement	\$14,700
<b>Community</b> TOTAL SOCIAL VALUE \$3,031,853	Enhanced Community and Municipal Resources	\$17,300
	Food Security - Localizing Food Production	\$1,908
	Strengthening of California Ag Economy	\$143,463
	Local Jobs Created	\$33,619
	Preservation of Heritage Farmlands	\$525,756
	Cultural and Scenic Value	\$1,833
	Valuing the Water Resource	\$1,204,357
	Environmental Impact of Sustainable Farm Practices	\$563,310
	Wildfire Risk Reduction	\$16,369
	Carbon Sequestered as Social Cost of Carbon	\$15,138
	Phosphorous Retention as Reduced Impact to Infrastructure	\$219,733
	Nitrogen Retention as Reduced Impact to Infrastructure	\$69,607
	Water Quantity Improvement as Cost Benefit to Consumers	\$212,498
	Air Quality - Dust Particulates Reduction	\$2,800
	Air Quality - Oxygen Production	\$1,481
	Air Quality - Other GHG Reduction	\$10
	Air Quality - Carbon Emission Reduction from Operations	\$2,671
<b>Total Social Value</b>		<b>\$4,405,215</b>

### Stakeholder Groups who Benefit:

#### Conservation Contract Buyers

- Ensuring water availability for the entire company value chain and stakeholders; sometimes restoring more water than the company uses.
- Reputational value, marketing opportunities
- Meeting internal conservation goals by saving water, intercepting nitrogen and phosphorus production

#### Alfalfa Farmers

Lower operating costs due to water savings, increased crop production, enhanced farm resilience and viability

#### Environment

Water savings, improved soil, erosion control, water quality, support of pollinator populations, habitat creation and protection, biological control of invasive species (reduced pesticide and herbicide application)

#### Community at Large

Water source protection, local economic stability, social value of reduced demand on community infrastructure through flood protection, runoff water quality, air quality improvements, carbon sequestration, wildfire risk reduction

#### Dairy Farmers

More reliable, accessible, higher quality alfalfa source for cattle feed

#### Agricultural Supply Chain

More sustainable and efficient practices