



# CLIMATE RESILIENCE & ADAPTATION

International Sustainable  
Winegrowing Summit



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CAPENSIS

GALERIE

LOKOYA

STONESTREET.  
ESTATE VINEYARDS

ANAKOTA

CAPTURE

• GRAN •  
MORAINÉ

MAGGY HAWK



ARCANUM

*Cenyth*



HICKINBOTHAM  
CLARENDON VINEYARD

Mt.  
BRAVE



*Brewer - Clifton*



MURPHY  
-GOODE-  
EST. 1985



BYRON



LA CREMA.

NIELSON

*WindRacer*

*Cambria*  
ESTATE WINERY

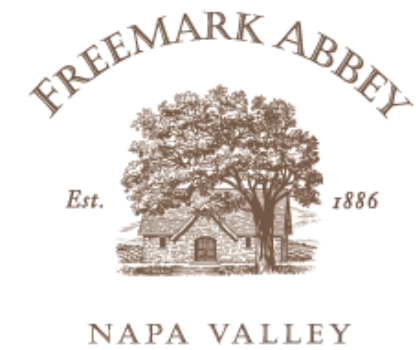
EDMEADES®  
★

*La Jota Vineyard Co.*  
HOWELL MOUNTAIN ESTATE

penner-ash®  
WINE CELLARS



CARDINALE



*Legacy*



JACKSON FAMILY WINES

A wide-angle photograph of a vineyard at sunset. The foreground and middle ground are filled with rows of lush green grapevines, their leaves catching the golden light of the setting sun. The vines are supported by a trellis system. In the background, rolling hills and mountains are visible, their silhouettes softened by the hazy, golden light of the sunset. The sky is a pale, clear blue, and the sun is a bright, glowing orb on the horizon, casting a long, warm glow across the entire scene.

“Take care of the land and it will take care of you.”

- Jess S. Jackson



**Successes to date...**

# 2020 Sustainability Goals & Progress

(metric-based goals only – from 2008 baseline)



<u>Category</u>	<u>2020 Goal</u>	<u>2018 Progress</u>
GHG intensity	25% reduction	39% reduction
Water intensity	33% reduction	36% reduction
Electricity offset from onsite renewables	50% offset	30% offset
Employee volunteering	75% participation	79% participation
Sustainable grower fruit	85% certified	80% certified
Zero Waste wineries & tasting rooms	90%+ diversion	98% diversion (wineries)



**GHG EMISSIONS REDUCTIONS**  
**14% absolute decrease since 2015**

**SAVING EVERY DROP**

**29M gallons saved per year**





# VINEYARD WATER EFFICIENCY

Reducing our reliance on groundwater



A wide-angle photograph of a vineyard during the golden hour of sunset. The rows of grapevines stretch across the foreground and middle ground, their leaves glowing with a warm, yellowish-green light. In the background, rolling hills and mountains are silhouetted against a bright, hazy sky where the sun is setting, creating a soft, golden glow. The overall scene is peaceful and scenic.

**Opportunities...and Challenges**

# CARBON FARMING / REGENERATIVE AG

## Compost, Cover Crops, Reduced Till





Saralee's Vineyard  
CDFA Healthy Soils  
Demonstration Project

Block 38  
Pinot Noir

Block 45  
Chardonnay

### Field Plot Layout

	No Till
	No Till + Compost Added
	Alternate Row Till
	Alternate Row Till + Compost Added
	Full Till
	Full Till + Compost Added

1 inch = 150 feet

0 80 150 300

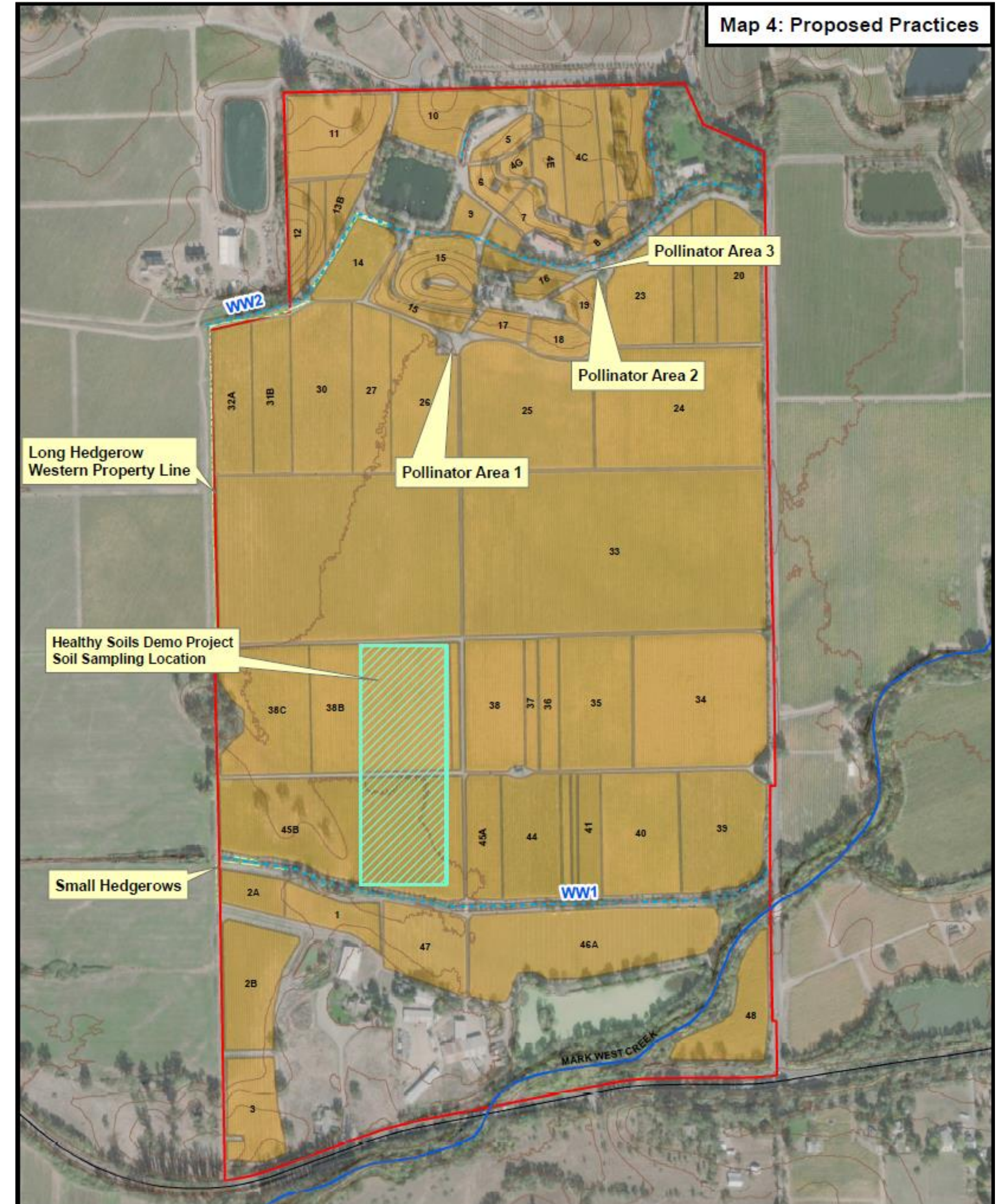


# Field Plot Layout

- **22 Acre Block (Chardonnay + Pinot Noir)**
- **6 different demonstration plots (replicated 3x each)**
- **Russian River Valley AVA, northern California**
- **Yolo Sandy Loam**

# Carbon Farm Plan

- 951 MTCO<sub>2</sub>e sequestered each year (200 acre vineyard)
- 4.78 MTCO<sub>2</sub>e per acre per year
- 66,905 MTCO<sub>2</sub>e per year across 14,000 acres
- ~63% of JFW's annual GHG Emissions footprint



**NO TILL**

**Is it feasible in a vineyard?**

*Jackson*  
FAMILY WINES  
**No Till  
+  
Compost Added**  
↔

45

# COMPOST

Can we get enough?





## MECHANICAL WEED CONTROL

Can we scale it?

# ZERO EMISSIONS AG EQUIPMENT

We're at the end of the line







**DROUGHT TOLERANT ROOTSTOCKS**  
**Which are the best for our sites?**

# GROUNDWATER RECHARGE

Putting it back during peak flows

Saralee's Vineyard  
Sonoma County, CA