

# SFS Farms

---

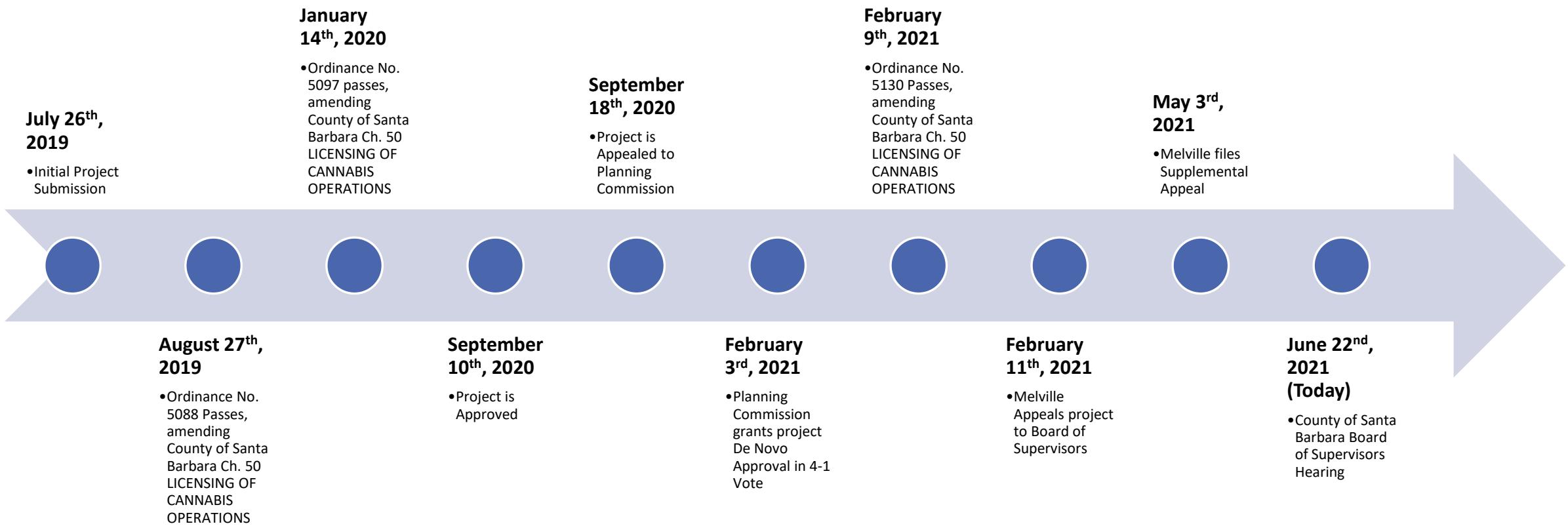
PRESENTATION TO THE BOARD OF SUPERVISORS JUNE 22ND, 2021

# Project Overview

- 1,000 acre heritage farm
- 8 miles from Buellton
- No hoop houses or new structures
- Organic farming
- Three-week harvests twice a year



# Application Timeline



# Appeal

---

## **DISAGREEMENT WITH ORDINANCE / PEIR**

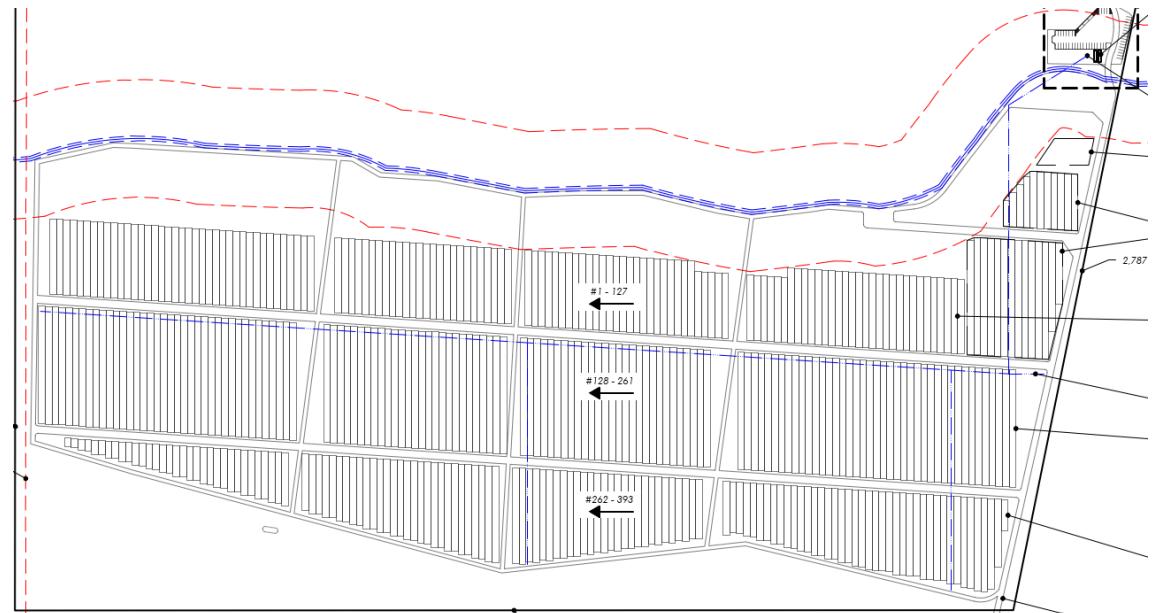
1. Overconcentration in Santa Rita Hills
2. Inconsistent with Agricultural Element
3. Non-Compliance with CEQA

## **PROJECT SPECIFIC ISSUES**

1. Non-Compliance with Williamson Act
2. Pesticide Migration
3. Information Regarding Terpene Taint

# Williamson Act / APAC Review

- APAC doesn't review setbacks
- Changes due to feedback from USFW, SWRQCB, CDFW
- Non-Agricultural use didn't expand
  - No commercial kitchen
  - No event spaces
  - No urbanization
  - No subdivision



APAC  
February 7<sup>th</sup>, 2020



Planning  
Commission  
February 3<sup>rd</sup>, 2021

# Drift

- Terpene Drift / Odor
  - Peer reviewed research published in academic journals and presented at conferences do not support any significant impacts from terpene drift
  - Odor mitigation plans are not required on Ag-II projects per SBLUDC
- Pesticide Drift
  - Is illegal under state law
  - Landowner and applicant reached handshake agreement with upwind neighbor to the west
    - Coordinate pesticide application
    - Plant trees for a windbreak on an existing agricultural berm



# Terpene Study

“...winegrapes **can** absorb cannabis terpenes in the atmosphere and, **depending on the concentration and frequency of exposure**, can potentially pose a threat to the grape and wine industry.” – **Exhibit 6**

**Title** – Estimated emissions, concentrations, and deposition of monoterpenes from an outdoor Cannabis farm

**Author** – Dr. William Vizuete, CSO, Pacific Environmental Analytics LLC

**Date** – December 6<sup>th</sup>, 2019

## Page 4

- **Paragraph 1** – “The purpose of this study is to determine whether or not it is feasible for cannabis monoterpenes from the proposed project (‘Hacienda’ 3800 Baseline Avenue Santa Ynez California) to taint grapes on a neighboring property (Appellant, 3950 Baseline Avenue).”
- **Paragraph 3** – “It should be noted that 1,8 cineole (eucalyptol) is the only monoterpene to be identified as potentially causing wine taint. No other monoterpenes (such as beta-myrcene, alpha-terpinene, and terpinolene) have been found in peer reviewed studies to cause taint.”

## Page 5

- “Our model was very conservative and did not include real-world losses of gas-phase concentrations due to photochemistry and deposition during transport and thus are upper bound estimations.”

## Page 12

*Table 2. The identified monoterpenes and their reported threshold values (THV) used in this study. Also shown are the number of days to achieve the THV at average gas-phase concentrations. Assuming a 21-day growing season for emissions of a mature Cannabis plant, data is shown as the percentage of THV values that are achieved in that time period.*

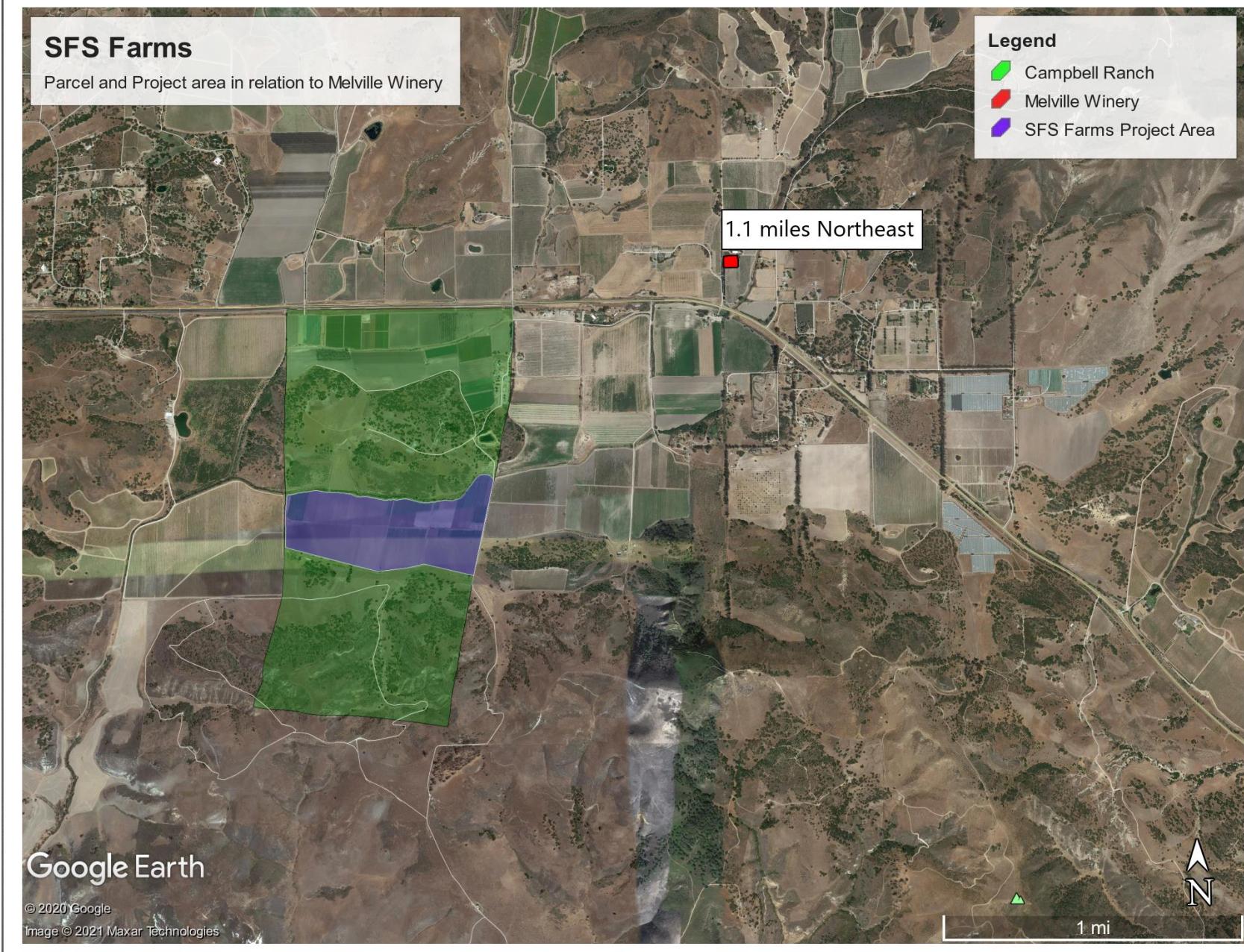
Monoterpene	Threshold Value (ug/kg)	Time to reach THV (days)	Season fraction of THV (%)
1,8-cineole	2.6	1121	1.9
Beta-myrcene	381	75.9	27.7
Alpha-terpinene	193	1005	4.1
Terpinolene	563	1486	1.4

# Today's Opposition

---

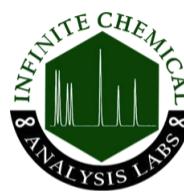
- Is opposed to cannabis in general and is too late
- Speculates about traffic and odor concerns not associated with this project
- Is anti-competitive on behalf of the wine industry
- Lacks Informed understanding of water use

# Distant from Tasting Room



# Chemical Analysis

- Chemical Analysis performed by accredited laboratory August, 2019 on affected Pinot Noir
- Certificate of Analysis shows no cannabis terpenes



## Certificate of Analysis

ICAL ID: 20190731-056  
Sample: 1907ICA3745.11011  
PENCE UNUM PINOT  
Strain: PENCE UNUM PINOT  
Category: Ingestible

### Terpene Profile

Analyte	LOQ	LOD	%	mg/g	Analyte	LOQ	LOD	%	mg/g
α-Bisabolol	0.20	0.10	ND	ND	δ-Limonene	0.20	0.10	ND	ND
α-Humulene	0.20	0.10	ND	ND	Eucalyptol	0.20	0.10	ND	ND
α-Pinene	0.20	0.10	ND	ND	γ-Terpinene	0.20	0.10	ND	ND
α-Terpinene	0.20	0.10	ND	ND	Geraniol	0.20	0.10	ND	ND
β-Caryophyllene	0.20	0.10	ND	ND	Linalool	0.20	0.10	ND	ND
β-Myrcene	0.20	0.10	ND	ND	Ocimene	0.20	0.10	ND	ND
β-Ocimene	0.20	0.10	ND	ND	(-)-Guaiol	0.20	0.10	ND	ND
β-Pinene	0.20	0.10	ND	ND	(-)-Isopulegol	0.20	0.10	ND	ND
Camphene	0.20	0.10	ND	ND	p-Cymene	0.20	0.10	ND	ND
Caryophyllene Oxide	0.20	0.10	ND	ND	Terpinolene	0.20	0.10	ND	ND
cis-Nerolidol	0.20	0.10	ND	ND	trans-Nerolidol	0.20	0.10	ND	ND
δ-3-Carene	0.20	0.10	ND	ND	<b>Total</b>			<b>0</b>	<b>0</b>

NR= Not Reported thus no analysis was performed, ND= Not Detected thus the concentration is less then the Limit of Quantification (LOQ), \*analytical instrumentation used:HS-GC-FID-FID\*

# Peer Reviewed Academic Studies



**2003** - Herve, E.; Price, S.; Burns, G.

- Eucalyptol in wines showing a “eucalyptus” aroma.
- In Proceedings VIIème Symposium International d’Onologie; Actualité’s Onologiques: Bordeaux, France, 2003

**2003** - Boido, E.; Lloret, A.; Medina, K.; Farin˜a, L.; Carrau, F.; Versini, G.; Dellacassa, E.

- Aroma composition of *Vitis vinifera* Cv. Tannat: the typical red wine from Uruguay.
- **Published** - *J. Agric. Food Chem.* 2003

**2003** - Farina, L.; Boido, E.; Carrau, F.; Versini, G.; Dellacassa, E.

- Terpene compounds as possible precursors of 1,8-cineole in red grapes and wines.
- **Published** – *Journal of Agricultural and Food Chemistry*, 2005

**2010** - Kalua, C. M.; Boss, P. K.

- Comparison of major volatile compounds from Riesling and Cabernet Sauvignon grapes (*Vitis vinifera* L.) from fruitset to harvest.
- **Published** - *Aust. J. Grape Wine Res.* 2010

**2010** - Capone, D. L.; Van Leeuwen, K. A.; Pardon, K. H.; Daniel, M. A.; Elsey, G. M.; Coulter, A. D.; Sefton, M. A.

- Identification and analysis of 2-chloro-6-methylphenol, 2,6-dichlorophenol and indole: causes of taints and off-flavours in wines.
- **Published** - *Aust. J. Grape Wine Res.* 2010

**2011** - Capone, D.L.; Leeuwen, K.V.; Taylor, D.K.; Jeffery, D.W.; Pardon, K.H.; Elsey, G.M.; Sefton, M. A.

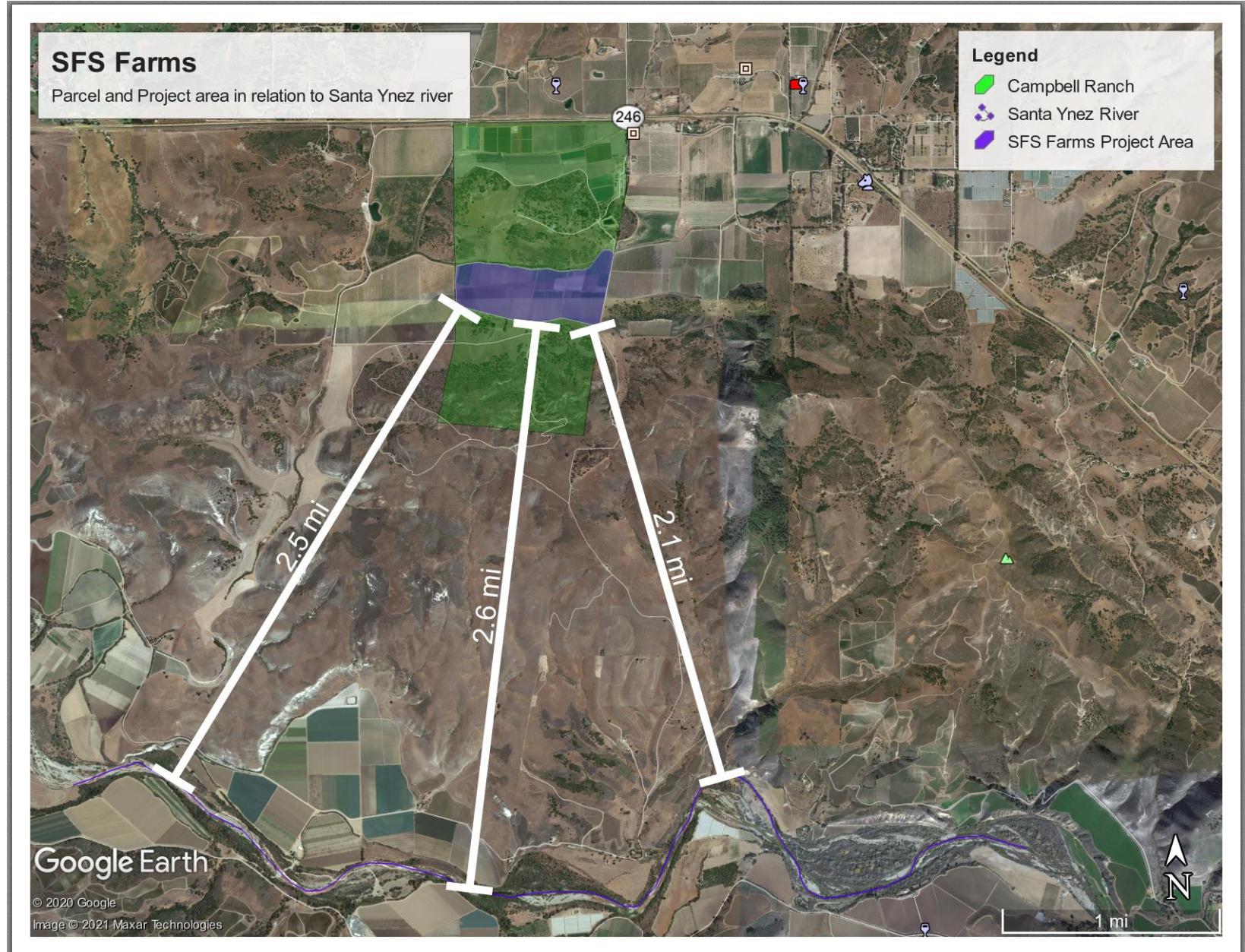
- Evolution and Occurrence of 1,8-Cineole (Eucalyptol) in Australian Wine
- **Published** - *J. Agric. Food Chem.* 2011

**2020** – Sellu G. S.; Kane, M.; Prendergast, J.

- Terpene drift from *Cannabis sativa* L. (hemp) and the implications for *Vitis vinifera* (wine grapes) planted in close proximity
- **Published** – ResearchGate June 2020

# Distant from Santa Ynez River

- Project area is over two miles from Santa Ynez
- Project is separated from Santa Ynez by multiple 300 acre parcels
- Project is separated from Santa Ynez by a mountain range



# Any Questions?

---