

Water Availability Analysis

This analysis evaluates the water usage impacts of the proposed conversion of approximately 8.2 acres of vineyard grapes to 51,500 square feet (1.182 acres) flowering canopy cannabis cultivation at 6445 Kelseyville Drive and 6245 Gold Dust Drive, Kelseyville CA. The remaining area is to be developed into a 100' fire protection and security buffer, four 30'x120' barns, and supporting ancillary nursery areas.

The water source is a permitted well (WE1775) on APN 07-013-22 at Lat 38.963964, Long -122.844347

Baseline Water Demand

Agricultural Demand

The existing area to be developed consisted of grape vineyard. Vineyard water usage in this region of Lake County, California was studied by the University of California Cooperative Extension in 2014 which published a summary of vineyard water usage. Approximately 10.8 acre-inches (0.9 acre feet) of water per acre of vineyard was utilized in this region.

The total water usage to be displaced by the proposed operation is thus 0.9 acre-feet per acre X 8.2 acres = 7.38 acre-feet (2,404,780 gallons) of water usage per year

Domestic Demand

Based on 50 gallons per day per bedroom with a 3 bedroom residence and a 1 bedroom studio yields a daily demand of 200 gallons per day. Total water usage estimate of 73,000 gallons per year.

Proposed Project Demand

Domestic Demand

Evaluation based on 50 gallons per day per bedroom with a 3 bedroom residence and a 1 bedroom studio yielding a daily demand of 200 gallons per day and employee usage of 15 gallons per day per employee. See appended water usage estimate table.

Total domestic demand of 126,000 gallons per year.

Irrigation Demand

See appended water usage estimate table. Approximately 700,000 gallons of water usage per year for the proposed project. This translates to approximately 2,415 gallons per day on average over the entire season. Watering generally occurs every two to three days for a peak daily usage of approximately 9,000 gallons during June-September. Water usage is reduced by utilizing both drip irrigation systems on timers as well as planting directly into native soil which reduces surface area for run-off and evaporation compared to above ground pots. The use of greenhouse structures also helps trap moisture and maintain high humidity levels which reduce plant transpiration losses.

Well Pump Test

A pump test was performed by Pete's Tractor and Pump. The well demonstrated an approximately 8' drawdown over the course of a 6 hours of pumping with a yield of 1000 gallons per minute. Approximately 345,000 gallons of water was pumped over that test period. The well recovered within 24 hours of the start of the test.

Summary

A proposed project water usage demand of 826,000 gallons per year compared to a baseline water usage demand of 2,477,780 gallons per year from the existing agricultural operation to be displaced. A net reduction in aquifer demand of approximately 1,650,000 gallons is expected.



Vineyard Water Use in Lake County, California
December 1, 2014

Glenn McGourty, Winegrowing and Plant Science Advisor
UCCE Mendocino and Lake Counties

Ryan Keiffer, Agricultural Technician
UCCE Mendocino

Dr. Broc Zoller, PCA, Kelseyville

Introduction

In 2013, wine grapes were the most widely planted (8,719 acres)¹ and highest farm gate value crop (\$61,3440,390)² in Lake County, California. Nearly all of these vineyards are irrigated, and many vineyards in lower areas are also frost protected with water applied by sprinklers. This is a brief summary of vineyard water use in the two most important wine grape production areas in Lake County.

Big Valley:

Principle wine grape variety: Sauvignon blanc

Frost protection: Average 10.4 frost protection events per year, with overhead sprinklers, 5.88 hours of frost protection @ .1 inches precipitation per hour = 6.12 acre inches

*Note: This is highly variable based on data from 1999 to 2014 in which there were 171 events total where temperatures were 33 degrees F or lower. Range of frost events per year were 1 (2014) to 20 (1999). (Source: UC IPM Weather Data Web Site). Grower records indicate that average duration of frost protection=5.88 hours per event. (Source: LCWGC Survey, Grower Practices and Records, 2014)

Irrigation: Based on 691 vines per acre (7' x 9' spacing) drip irrigation, July 1-September 9, 9 hours per week, 0.229 inches per week = 2.29 acre inches

Post harvest irrigation (optional): 24 hours of overhead sprinkling, 0.1 inches precipitation per hour = 2.4 acre inches

TOTAL: 10.81 acres inches or 0.9 acre feet

Note regarding frost protection: Many years the vineyards' soil profiles are at field capacity or saturation in the spring from winter precipitation when frost protection water is applied. In those cases, water is likely to percolate through the soil profile, eventually helping to recharge the water table, and will be available for reuse. If the soil is below field capacity, the application of frost protection water will charge the soil reservoir (available water holding capacity) and be utilized by the vine for plant growth.

Red Hills:

Principle variety: Cabernet sauvignon

Frost protection: 0 inches, most places have no overhead sprinklers and limited water for irrigation.

Irrigation: Based on 908 vines per acre (6' x 8' spacing), irrigation is done from mid-June to late September, 17 hours per week (.57 acre inches), 14 weeks = 8 acre inches (includes post harvest applications)

TOTAL: 8 acre inches or 0.66 acre feet

Comparative Use of Water (Average) of Irrigated Crops Around California*

Crop	Location	Amount of water used in acre inches/ year
Wine Grapes	Red Hills, Lake County	8
Wine Grapes	Big Valley, Lake County	11
Wine Grapes	San Joaquin County	18
Table Grapes	San Joaquin Valley	36
Walnuts	Sacramento Valley	36
Almonds	Sacramento Valley	38
Alfalfa	Sacramento Valley	42
Avocados	Riverside/San Diego Co.	42
Peaches	San Joaquin Valley	44
Rice	Sacramento Valley	60

*Source: Most current UC Davis Agricultural Economics Department/ UC Cooperative Extension Cost Studies
<http://coststudies.ucdavis.edu/>

Data Sources:

1. UC IPM Weather Data Web Site, <http://ipm.ucdavis.edu/WEATHER/index.html>, and grower records of actual frost protection, 2007-2014.
2. Survey, Grower Practices and Records, 2014, Lake County Winegrape Commission.

Literature Cited:

1. California Grape Acreage Report, 2013 Crop. California Department of Food and Agriculture, Sacramento, California. Table 12, page 42.
2. 2013 Lake County Crop Report. Lake County Department of Agriculture, Lakeport, California. Page 2.

Water Usage Estimates

Domestic usage estimate based on 50 gallons per day for the 3 bedroom residence and studio cabin and 15 gallons per day per employee.

ESTIMATED MONTHLY WATER USAGE (GALLONS)			
Month	Cultivation (Irrigation)	Approximate Daily Use	Domestic
January	5000	161	8,000
February	20000	714	12,000
March	45000	1,452	8,000
April	65000	2,167	8,000
May	80000	2,581	12,000
June	90000	3,000	12,000
July	90000	2,903	12,000
August	90000	2,903	12,000
September	90000	3,000	9,000
October	75000	2,419	12,000
November	45000	1,500	9,000
December	5000	161	12,000
Total	700,000	22,962	126,000



E-Mail: zarrosabev@gmail.com

Contact: Zarro Sabev

Job Address: 6245 Gold Dust Drive ~ Kelseyville, CA 95451

DATE	TIME	TECH	WATER LEVEL	GAL. PER MINUTE	WATER COLOR	WATER METER	COMMENTS	
11/22/2020	10:00am	Pete	46'	1000	Clear	14,387		
	10:30am		48'					
	11:00am		48'					
	11:30am		48'					
	12:00pm		49'					
	12:30pm		50'					
	01:00pm		50'					
	01:30pm		51'					
	02:00pm		52'					
	02:30pm		52'					
	03:00pm		53'					
	03:30pm		54'					
	04:00pm		54'			360,014.39		
11/23/2020	10:00 AM		46'					24-hours post-test

V

RECORDING REQUESTED BY:

Orange Coast Title Company of Southern California

WHEN RECORDED MAIL DOCUMENT AND TAX STATEMENT TO:

Svetozar Sabev
710 West Ladd St
Arlington Heights, IL 60004

APN: 007-013-230-000 and 007-013-220-000
TITLE ORDER NO.: 100-2120594-01
ESCROW NO.: 2120594-LF



Doc # 2020009147
Page 1 of 6
Date: 7/29/2020 01:15P
Filed by: SYNREG
Filed & Recorded in Official Records
of COUNTY OF LAKE
RICHARD A. FORD
COUNTY RECORDER
Fee: \$1459.00

THIS SPACE FOR RECORDER'S USE ONLY

GRANT DEED

The undersigned Grantor(s) declare(s) that the **DOCUMENTARY TRANSFER TAX IS: \$1,430.00 county**
☒ computed on the full value of the interest of property conveyed, or
☐ computed on the full value less the value of liens or encumbrances remaining thereon at the time of sale.
☐ OR transfer is EXEMPT from tax for the following reason:

Exempt from the fee per GC 27388.1 (a) (2);

This document is subject to
Documentary Transfer Tax

Svetozar Sabev
Signature of declarant or agent determining tax

Firm Name

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, Burton Ranch Vineyards LLC, a California limited liability company

HEREBY GRANT(S) to Svetozar Sabev, a married man as his sole and separate property

All that real property situated in the Unincorporated area of Kelseyville, County of Lake, State of California, described as:
COMPLETE LEGAL DESCRIPTION IS ATTACHED HERETO AND MADE A PART HEREOF AS EXHIBIT "A"

Commonly Known As: 6267 Kelsey Creek Drive and 6245 Gold Dust Road, Kelseyville, CA 95451



MAIL TAX STATEMENTS AS DIRECTED ABOVE

Burton Ranch Vineyards LLC

By: _____
Michael Harlan, Member

By: _____
Arden Burt Harlan, Member

Signed
In
counterpart

The David and Cynthia Runstrom Trust, established February 3, 2004

By: David B. Runstrom TRUSTEE
David B. Runstrom, as Co-Trustee

By: Cynthia H. Runstrom TRUSTEE
Cynthia H. Runstrom, as Co-Trustee

July 4, 2020

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy or validity of that document

STATE OF Washington
COUNTY OF Clallam

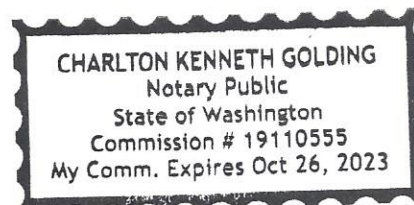
On July 20, 2020, before me, Charlton Kenneth Golding, a Notary Public
personally appeared David B. Runstrom and Cynthia H. Runstrom

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature [Signature] (SEAL)



Burton Ranch Vineyards LLC

By: Michael Harlan
Michael Harlan, Member

By: _____
Arden Burt Harlan, Member

Signed In
counterpart

The David and Cynthia Runstrom Trust, established February 3, 2004

By: _____
David B. Runstrom, as Co-Trustee

By: _____
Cynthia H. Runstrom, as Co-Trustee

July 4, 2020

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy or validity of that document

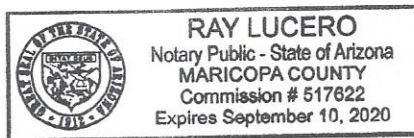
STATE OF CALIFORNIA AZ
COUNTY OF Maricopa
On 7-20-2020, before me, Ray Lucero, a Notary Public
personally appeared Michael Harlan

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Ray Lucero (SEAL)



Burton Ranch Vineyards LLC

By: _____ *Signed By counterpart*
Michael Harlan, Member
By: *Arden Burt Harlan*
Arden Burt Harlan, Member

The David and Cynthia Runstrom Trust, established February 3, 2004

By: _____
David B. Runstrom, as Co-Trustee
By: _____
Cynthia H. Runstrom, as Co-Trustee

July 4, 2020

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy or validity of that document

STATE OF CALIFORNIA }
COUNTY OF _____ }

On _____, before me, _____, a Notary Public
personally appeared _____

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature *See attached* (SEAL)

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Placer

On 7/20/2020 before me, Grace Lee, Notary Public
(insert name and title of the officer)

personally appeared Arden Burt Raylan,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing
paragraph is true and correct.

WITNESS my hand and official seal.

Signature [Signature] (Seal)

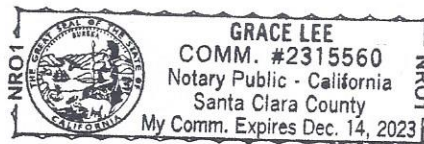


Exhibit "A"

Parcel One: APN 007-013-230-000

The North half of the Southeast quarter of the Northeast quarter of Section 22, Township 13 North, Range 9 West, M.D.B.

Parcel Two: APN 007-013-220-000

The South half of the Southeast quarter of the Northeast quarter of Section 22, Township 13 North, Range 9 West, M.D.M.

Also the East half of the Southwest quarter of the Northeast quarter of Section 22, Township 13 North, Range 9 West, M.D.M.

Savings and excepting therefrom the South 144 feet thereof, described as beginning at the Southeast corner of the Southwest quarter of the Northeast quarter of said Section 22, and running thence North 144 feet; and: thence West 660 feet; and thence South 144 feet; and thence East 660 feet to the place of beginning.

leg.